Power, policies, and algorithms – technologies of surveillance in the European border surveillance regime



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Zusammenfassung

Der vorliegenden Dissertation ***Power, policies, and algorithms – technologies of surveillance in the European border surveillance regime (Macht, Strategien und Algorithmen – Überwachungstechnologien im europäischen Grenzüberwachungsregime)*** gemäß § 12 (3) PromO der Fakultät für Geistes- und Sozialwissenschaften des Karlsruher Instituts für Technologie

Der Gegenstand der vorliegenden Arbeit ist das wachsende Grenzüberwachungsregime der Europäischen Union. Der Begriff Grenzüberwachungsregime bezeichnet das technologische Ensemble der verschiedenen Überwachungstechnologien, welche dazu dienen, das europäische Grenzregime zu implementieren und durchzusetzen. Dies umfasst komplexe Meta-Überwachungssysteme wie Eurosur (European border surveillance system – Europäisches Grenzüberwachungssystem), eine Reihe großer Datenbanken wie z. B. das Schengener Informationssystem II (SIS II) oder das Visa Informationssystem (VIS), aber auch einzelne klassische Überwachungstechnologien wie die Überwachung per Flugzeug. Überwachungstechnologien sind hier definiert als jede Art von Technologie, die der Überwachung, Registrierung, Verhaltensanalyse, Vorhersage und Bewertung von Menschen, Tieren oder Dingen, ihres Verhaltens und ihrer Beziehungen dient. Sie kann Elemente von Entscheidungsfindung, Kontrolle und Steuerung enthalten.

Das europäische Grenzregime wiederum ist hier definiert als die Summe aller Gesetze (EU-Verordnungen und -Richtlinien, nationale Gesetze), Verordnungen, Richtlinien, administrativer Regeln, Verwaltungsakten, Mikrostrategien und Makrostrategien, Institutionen, Technologien und technologischer Artefakte, welche der Aufrechterhaltung des Schengen-Regimes sowie dem Schutz der Schengen-Grenzen (EU-Grenzen und Nicht-EU-Grenzen) sowie der EU-Grenzen (Schengen- und Nicht-Schengen-Grenzen) dienen und das Ziel haben, die Passage von Menschen, Tieren und Waren über diese Grenzen zu kontrollieren. Dies umfasst den Schengen-*Acquis*, d. h. den gemeinsamen Besitzstand aller rechtlichen Regelungen zur Umsetzung der Schengen-

Verordnung sowie alle Rechtsinstrumente zur Umsetzung des gemeinsamen Europäischen Asyl-Systems (GEAS). Die inkludiert alle staatlichen und supranationalen Behörden, Agenturen und Institutionen, die mit dem Grenzschutz sowie der Umsetzung der genannten Rechtsinstrumente betraut sind.

Das europäische Grenzüberwachungsregime erfuhr als Bestandteil des europäischen Grenzregimes ein signifikantes quantitatives und qualitatives Wachstum, das fortwährt. Dies betrifft die Anzahl der eingesetzten Systeme, die Anzahl der in ihnen gespeicherten Datensätze, die Ausweitung der überwachten Personenkategorien, die Art der gespeicherten Datensätze (z. B. den zunehmenden Einsatz biometrischer Daten), die Vernetzung der Systeme untereinander sowie die Qualität der Überwachung (z. B. durch den Einsatz von Scoring-Technologien). Der dadurch entstehende Umfang der Überwachung an den Schengen-Grenzen wirft die Frage auf, ob hier ein Überwachungsregime entsteht, welches im Sinne Foucaults als panoptisch zu bezeichnen ist (Foucault, M., 1995/1975, S.195-228). Diese Entwicklung der Versicherheitlichung des Grenzregimes durch Überwachungstechnologie ist untrennbar mit dem Prozess der Digitalisierung verknüpft und wirft die Frage auf, ob sich das Grenzregime als solches in einem Prozess der Digitalisierung bzw. Algorithmisierung befindet. Die Kernforschungsfrage dieser Dissertation lautet daher:

Entwickelt sich das europäische Grenzregime zu einem algorithmischen Panoptikum?

Die Entstehung der Grenzüberwachungsregimes als solches ist erklärungsbedürftig.

Die Entwicklung des europäischen Grenzregimes war und ist ein politischer Prozess. Der Begriff des Politischen bzw. des politischen Prozesses (p*olitics*) wird hier, H. D. Lasswells klassischer Definition folgend, als der Prozess definiert, der klärt, welcher Akteur im politischen Handeln „was, wann und wie bekommt“ (Hill, M., 2005, S. 13).[1] Dies inkludiert die Frage, welche Akteure

[1] Im Original: “who gets what when how”, H.D. Lasswell (1936), zitiert in Hill, M. 2005, S. 13

ihre materiellen Interessen und normativen Vorstellungen in der politischen Auseinandersetzung durchsetzen. Die Entwicklung des Grenzüberwachungsregimes geht auf eine Reihe von *policies*, hier einer ebenfalls klassischen Definition folgend definiert als „eine Reihe miteinander verknüpften Entscheidungen, welche die Auswahl von Zielen und der Mittel, sie zu erreichen, in spezifischen Situation betreffen“, zurück (Hill, M., 2005, S.7)[2]. Der Ausbau von Überwachungssystemen im Grenzregime stellt selbst eine *policy* da. Um diese zu erklären, bedarf es sowohl der Erklärung der Ziele, der politischen Funktion der *policy*. Es bedarf aber insbesondere einer Analyse der Akteure und Strukturen, welche diese *policy* vorantreiben. Dies wirft wiederum die Frage nach Machtstrukturen und Entscheidungsstrukturen auf. Daher ist es notwendig, die Macht- und Entscheidungsstrukturen, die Interessen, Akteure und Machtverhältnisse in der EU, aber vor allem im Politikfeld der EU-Justiz und Innenpolitik, welches den institutionellen Rahmen sowohl des EU-Grenzregimes als auch des EU-Grenzüberwachungsregimes darstellt, zu analysieren. Macht, hier Michael Mann folgend als die „Fähigkeit, andere dazu zu bringen, Dinge zu tun, die sie ansonsten nicht tun würden“, und Machtstrukturen, hier G. W. Domhoff folgend als „Netzwerk von Organisationen und Funktionen in einer Stadt oder Gesellschaft, welche verantwortlich für die Aufrechterhaltung der allgemeinen sozialen Struktur sind“, definiert, werden somit zu zentralen Begriffen der Analyse (Mann, M. 2013, S. 1; Domhoff, G. W., Dye, T. R. (Hrsg.) 1987, S. 9)[3].

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2 Die Definition stammt von W.I. Jenkins (1978) und wird zitiert in Hill, M. (Hill, M., 2005, S. 7). Im Original: “a set of interrelated decisions concerning the selection of goals and the means of achieving them within a specified situation”

3 Im Original und in voller Länge: “A ‘power structure’ is a network of organizations and roles within a city or society that is responsible for maintaining the general social structure and shaping new policy initiatives. A “power elite” is the set of people who are the individual actors within the power structure. Because the social order maintained by the power structure is a stratified one, with great inequalities of wealth and income, a power structure is also a system of organized domination and the power elite often will use intimidation and coercion on its critics and opponents if necessary” (Domhoff, G. W., Dye, T. R. (Hrsg.) 1987, S. 9).

Darüber hinaus stellt das Grenzregime als Durchsetzungsregime potentiell eine eigene Machtstruktur dar. Das Grenzüberwachungsregime wiederum ist ein technologischer Machtfaktor. Es ist Durchsetzungsinstrument vorhandener Machtstrukturen, aber durch den Ausbau der Überwachung entstehen auch neue Formen technologisch vermittelter Macht. Es ist daher auch zu klären, inwiefern beide Regime Machtstrukturen darstellen, wie die Machtverhältnisse in ihnen aussehen und wie ihr Verhältnis zueinander ist.

Die weiteren Forschungsfragen dieser Dissertation lauten daher:

Was ist die spezifische Rolle, die spezifische Funktion von Überwachungstechnologien im europäischen Grenzregime und im potentiellen algorithmischen Panoptikum an den Schengen-Grenzen?

Wie ist die Machtstruktur im europäischen Grenzregime und im europäischen Grenzüberwachungsregime strukturiert und was sind ihre Machtquellen?

Wie ist das Verhältnis zwischen diesen miteinander verwobenen Machtstrukturen?

Wie wird im europäischen Grenzregime und im europäischen Grenzüberwachungsregime im Allgemeinen sowie im potentiellen algorithmischen Panoptikum des europäischen Grenzüberwachungsregime im Speziellen Macht produziert und reproduziert, und wie manifestiert sie sich?

Die Antwort auf die Forschungsfragen wird in vier inhaltlichen Kapiteln entwickelt.

Kapitel 2 führt das Grenzregime und das Politikfeld der EU-Justiz- und Innenpolitik ein. Dies umfasst sowohl die Geschichte und Vorgeschichte des Politikfeldes als auch den institutionellen und rechtlichen Rahmen des Politikfeldes und des Grenzregimes. Es wird auf die Entwicklung der Schengen-Verordnung und der Dublin-Verordnung als der zentralsten Rechtsinstrumente des Grenzregimes eingegangen. Des Weiteren werden auf der *policy*-Ebene die JHA-Fünf-Jahres-Programme (Tamperer, Haager und Stockholmer Programm), das Konzept des integrierten Grenzmanagements und vor allem die entscheidende Strategie des Externalisierung im Hinblick auf die Fragestel-

lung, insbesondere auf längerfristige Strategien hin, analysiert. Teil der Analyse ist die Darstellung des grundlegenden *policy*-Problems des Grenzregimes, welches in Abwesenheit eines gemeinsames Migrationsregimes als zentrales Steuerungsinstrument für Migration fungiert.

Eine Darstellung der langen Krise des Grenzregimes und ihres Kulminationspunktes in 2015 beendet das Kapitel.

Kapitel 3 ist das Theoriekapitel. Theorie ist ein zentrales Element dieser Dissertation und einer der wichtigsten, wenn nicht sogar das zentrale Werkzeug zur Beantwortung der Fragestellung. In diesem Kapitel stehen die Begriffe Macht und Machtstruktur im Zentrum. Die Basis der Analyse politischer Macht und Machtstrukturen in dieser Dissertation bilden die Arbeiten von Michael Mann und G. W. Domhoff, die zu einem gemeinsamen Theorierahmen zusammengeführt werden. Zuerst wird Michael Manns Theorie der netzwerkbasierten ideologischen, militärischen, ökonomischen und politischen Macht eingeführt (Mann, M. , 1986/2012, 1993/2012, 2012, 2013). Diese wird dann durch G. W. Domhoffs *policy*-Theorie der Eliten-Macht und seine Variante der Machtstrukturen-Forschung ergänzt.

Der nächste Abschnitt widmet sich Michel Foucaults Theorie der Disziplinarmacht und des Panoptizismus. Diese wird in einem nächsten Schritt auf die Bedingungen der digitalen Welt sowie das Grenzüberwachungsregime in abstrakter Weise angewandt. Im letzten Schritt wird der gemeinsame Theorierahmen von Mann / Domhoff auf das Politikfeld der EU-Justiz und -Innenpolitik, das Grenzregime und das Grenzüberwachungsregime angewandt. Auf dieser Basis werden weiterführende Leitfragen und Hypothesen für die nächsten zwei Kapiteln formuliert.

Kapitel 4 und 5 stellen ein zusammenhängendes Argument in zwei Schritten dar. Kapitel 4 ist eine deskriptive Darstellung des eigentlichen Grenzüberwachungsregimes. Es stellt die wichtigsten existierenden Datenbanken und Überwachungssysteme sowie die wichtigsten Ausbaupläne vor. Dabei geht es sowohl auf die technologischen als auch auf die rechtlichen und politischen Eigenschaften ein. Die wichtigsten technischen und politischen Trends (Aus-

bau von Biometrie und prädiktiver Analyse sowie der Trend zur Interoperabilität) werden erläutert, bevor das Kapitel mit einer ersten Gesamteinschätzung des Grenzüberwachungsregimes endet.

Kapitel 5 baut hierauf auf und knüpft zugleich an Kapitel 3 an. Im Lichte der technologischen Aspekte, die in Kapitel 4 diskutiert wurden, wird die Theorie der Disziplinarität und der Panoptizität in größerer Detailliertheit auf den Fall des europäischen Grenzüberwachungsregimes angewandt. Hierbei wird ein Fokus auf die Machteffekte und die Produktion von panoptischer Macht im Grenzregime gelegt. Eine (bereits in Kapitel 3 angerissene) Theorie indirekter panoptischer Macht im Grenzüberwachungsregime wird expliziert. Zudem betrachtet es den qualitativen Wandel des Grenzüberwachungssystems von einem relativ limitierten und fokussierten System der Überwachung hin zu einem interoperablen System der Massenüberwachung, welches biometrische Daten und Methoden prädiktiver Analyse und automatischen Entscheidens nutzt. Der zweite Teil des Kapitels widmet sich den Machtstrukturen und den politischen Auseinandersetzungen im Themenfeld. Zuerst erfolgt eine Analyse des politischen und ökonomischen Akteursnetzwerks, das (überwiegend erfolgreich) *policies* der Überwachung im Grenzregime initiiert und von deren Einführung profitiert. Dann erfolgt eine Analyse des politischen Akteursnetzwerks, welches sich (oft erfolglos) gegen die Einführung von Massenüberwachung im Allgemeinen, aber auch den Einsatz von Überwachungstechnologie im Grenzregime im Speziellen einsetzt. Die Zusammenfassung stellt die wesentlichen Ergebnisse der Dissertation dar.

Die wesentlichen Ergebnisse der Dissertation sind:

1. Das europäische Grenzüberwachungsregime entwickelt sich tatsächlich zu einem partiellen algorithmischen Panoptikum:

Der Ausbau des Grenzüberwachungsregimes war eine langfristige *policy* und erfolgte in einem Zeitrahmen von 10 bis 20 Jahren. Das Ergebnis ist ein profunder Wandel sowohl hinsichtlich der Quantität als auch der Qualität der Überwachung. Dies betrifft die Zahl der Datenbanken und Überwachungssysteme ebenso wie die Anzahl der in ihnen enthaltenen Datensätze, welche beide

signifikant anstiegen. Dies betrifft die Ausweitung der erfassten Personengruppen, die Zahl der Zugriffspunkte sowie den technologischen und qualitativen Ausbau der Überwachung. Dies bezieht sich insbesondere auf den Ausbau biometrischer Datenerfassung, den Ausbau der Interoperabilität der Systeme sowie den Ausbau prädiktiver Analysemethoden.

Die Zielsetzungen der untersuchten Systeme variieren. Es gibt klassische Grenzüberwachungssysteme (Eurosur), Systeme, die primär darauf abzielen, sicherheitsrelevante Personen im präventiv zu identifizieren (z. B. PNR-Datenbanken und ETIAS) oder eine Sicherheitsprüfung durch wechselseitige Abfrage von Datenbanken, verstärkt durch den Ausbau der Interoperabilität, durchzuführen (das SIS II, das VIS, das EES, das ETIAS, ECRIS, ECRIS-TCN, Eurodac, Europol und Interpol-Datenbanken). Hier zeigt sich das Grenzüberwachungsregime in der Funktion einer Membran für den Schengen-Raum.

Das Zusammenspiel dieser Systeme und Entwicklungen führte dazu, dass sich das europäische Grenzüberwachungssystem von einem relativ limitierten und fokussierten System der Überwachung in ein partiell panoptisches System der Massenüberwachung, welches auf biometrische Daten und massenhaft auf Big-Data-Methoden und prädiktive Analysemethoden wie Scoring und Sorting zurückgreift, entwickelte.

Das Grenzüberwachungsregime produziert eine spezifische Form von Macht: indirekte panoptische Macht. Es besitzt kein klares Zentrum, es gibt kein Gegenstück zum zentralen Turm im Benthams Panoptikum. Die Überwachungsmechanismen sind auf die verschiedenen Systeme und Datenbanken verteilt. Hinzu kommt der Rückgriff auf die alltäglichen digitalen Ökosysteme der Überwachung, wie z. B. Kreditkartendaten. Die Überwachung speist sich aus diesen diversen Datenquellen und wird aus ihnen zusammengeführt, zum Teil gezielt und systematisch, wie z. B. durch die Pläne zur Interoperabilität von EU-Datenbanken.

Daher ist es für das überwachte Individuum äußerst schwierig abzuschätzen, inwiefern es überwacht wird, welche seiner Daten zu welchen Zwecken ge-

nutzt werden, welche Stellen Zugriff auf seine Daten haben und welche Effekte dies auf das Individuum haben kann. Hier entsteht der panoptische Effekt. Er ist indirekt, da es zum einen kein klares Zentrum gibt und zum anderen das europäische Grenzüberwachungsregime relativ unbekannt ist und daher ein Internalisierungseffekt weitgehend entfällt.

Die angewandten Mechanismen der Überwachung sind zudem auch deshalb panoptische sowie disziplinarische Technologien, da sie von ihrer Heuristik und Herangehensweise ähnlich, wenn auch nicht gleichartig, funktionieren wie die nicht-digitalen Methoden und Technologien, anhand derer Foucault seine Theorien in *Überwachen und Strafen* entwickelte (Foucault, M.,1995/1975). Diese Eigenschaft teilen sie mit vielen anderen auf Big-Data basierten Methoden der Überwachung sowohl im öffentlichen als auch im privaten Sektor. Sie alle haben die Funktion, Individuen, Kollektive, Bevölkerungen und Räume lesbar zu machen, sie zu überwachen und zu untersuchen, um sie letztlich zu kontrollieren und zu steuern. Die Mechanismen der hierarchischen Überwachung, der Disziplin und der Untersuchung werden im 21. Jahrhundert in digitalen Technologien verwirklicht, im Grenzüberwachungsregime in Technologien wie ETIAS oder PNR-Daten-Scoring. Andere Technologien, wie z. B. Eurodac, erinnern an Techniken der Kontrolle mobiler Populationen, wie sie Foucault beschrieb (Foucault, M. 1995/1975, S. 141-143).

2. Die zentrale politische Funktion der europäischen Grenzüberwachungsregime ist die Implementierung und Durchsetzung des europäischen Grenzregimes. In dieser Funktion dient das Grenzüberwachungsregime als Verstärker einer spezifischen Form von Macht: infrastruktureller Macht[4]*. Das Grenzregime wiederum dient mangels einer gemeinsamen Migrationspolitik als Steuerungsinstrument der Migrationspolitik.*

[4] Infrastrukturelle Macht bezeichnet „die Fähigkeit eines Staates (sei er tyrannisch oder demokratisch), die Gesellschaft zu durchdringen und politische Entscheidungen logistisch umzusetzen“. Im Original: “the capacity of a state (whether despotic or democratic) to actually penetrate society and implement logistically political decision throughout the realm” (Mann, M. 2012, S. 13)

Die Hauptfunktion des Grenzüberwachungsregimes ist es, das Grenzregime zu implementieren und durchzusetzen. Von Beginn an erfüllte es zum einen die Funktion, wahrgenommene Sicherheitslücken, welche durch den Wegfall der internen Grenzkontrollen entstanden sind, zu schließen (Baumann, M. , 2014). Zum anderen dient es dazu, die Regeln der Schengen-Verordnung, der Dublin-Verordnung und des GEAS umzusetzen und durchzusetzen.

Das Grenzregime wiederum ist in der paradoxen Situation, dass es auf einer *policy*-Ebene eine Funktion als zentrales Steuerungselement der Migration erfüllt, für welche es eigentlich nicht geschaffen wurde.

Der durch die EEA und Schengen geschaffene gemeinsame Wirtschaftsraum bedürfte eigentlich einer gemeinsamen Migrationspolitik. Ein diesbezüglicher Konsens bestand allerdings zu keinem Zeitpunkt und ist auch nicht in Sicht. Dadurch werden das GEAS und die Dublin-Verordnung zum zentralen gemeinsamem Steuerungsinstrument in der Migrationspolitik. Das Grenzregime wiederum befasst sich primär mit Fragen von Flucht, irregulärer Migration und Asyl. Diesbezüglich fahren sowohl die einzelnen Mitgliedsstaaten als auch die EU eine primär restriktive Politik. Das europäische Grenzregime und seine zentralen Elemente des GEAS und der Dublin-Verordnung sind hierbei primär auf die Verhinderung, Kontrolle und Steuerung irregulärer Migration ausgerichtet. Die Regeln der Dublin-Verordnung sind wiederum so ausgelegt, dass die Lasten des Grenzregimes primär den Grenzstaaten aufgelastet werden, was eine Konsensfindung als Basis einer nicht nur reaktiven und restriktiven Migrationspolitik zusätzlich erschwert. Zentrales Element des Grenzregimes war die Strategie der Externalisierung des Grenzregimes durch die Anrainerstaaten in der Mittelmeerregion. Als diese Strategie in Folge des Arabischen Frühlings kollabierte, führte dies im Zusammenspiel mit weiteren Faktoren zum zeitweisen und partiellen Zusammenbruch des Grenzregimes. Mit dem EU-Türkei-Deal entstand eine erneute prekäre Stabilisierung.

Das Grenzregime hat also eine politische Funktion inne (Ersatz für eine umfassende gemeinsame Migrationspolitik), für die seine primären Steuerungsmittel nicht ausgelegt sind. Das Grenzüberwachungsregime wiederum dient

als Werkzeug infrastruktureller Macht dazu, diese Grenzregime im Rahmen des Möglichen umzusetzen und durchzusetzen.

3. Das europäische Grenzüberwachungsregime ist in einer politikfeldspezifischen staatszentrierten Machtstruktur verwurzelt, welche aus dem intergouvernementalen politischen Machtnetzwerk (die Mitgliedsstaaten), dem supranationalen politischen Machtnetzwerk (die EU) und Teilen des ökonomischen Machtnetzwerks (die Rüstungsindustrie und die Überwachungsindustrie) besteht. In dieser Machtstruktur sind die Befürworter des Ausbaus der Überwachung strukturell dominant.

Die Analyse der Machtstrukturen erfolgte auf Basis des empirischen Materials der benutzten Literatur und Quellen, inklusive der geführten Interviews, und insbesondere auf dem in Kapitel 3 erarbeiteten Theorierahmen aus den Theorien G. W. Domhoffs und M. Manns (Domhoff, G. W., 2014, Mann, M., 1986/2012, 1993/2012, 2012, 2013). Die in diesem Kapitel formulierten Hypothesen wurden im Wesentlichen bestätigt und durch weitere Aspekte ergänzt.

Im vorliegenden Fall ist das politische Machtnetzwerk (der Staat) das wichtigste der Vier wichtigsten Netzwerke der Macht aus Michael Manns Theorie (2014 Mann, M., 1986/2012, 1993/2012, 2012, 2013).

In diesem Fall besteht das politische Netzwerk aus zwei politischen Machtnetzwerken, die miteinander sowohl im Wettbewerb stehen als auch kooperieren. Auf der einen Seite sind dies die Mitgliedsstaaten, welche freiwillig einen Teil ihrer Souveränität aufgaben, um die EU zu bilden. Auf der anderen Seite stehen die intergouvernementalen und supranationalen Institutionen der EU. Beide Netzwerke zusammen bilden das hier relevante politische Machtnetzwerk: die EU.

Die Machtbalance zwischen den beiden Machtnetzwerken ist in den verschiedenen Politikfeldern unterschiedlich. Das hier relevante Feld der Justiz- und Innenpolitik wurde von den Mitgliedsstaaten stets als ein besonderes sensibles Feld betrachtet, welches Kernaufgaben der staatlichen Souveränität betrifft. Daher waren sie stets bestrebt, die Aufgabe von Souveränitätsrechten in die-

sem Feld zu limitieren, was sich in einem besonders informellen und intergouvernementalen Entscheidungsmodus niederschlug, welcher mit geringerer legislativer und judikativer Kontrolle als in anderen Politikfeldern einherging. Eine diesbezügliche Angleichung erfolgte erst mit dem Vertrag von Lissabon. Daher waren die Mitgliedsstaaten und die intergouvernementalen EU-Institutionen, die sie repräsentieren, die treibende und dominierende Kraft im Feld. Die Dominanz der Mitgliedsstaaten zeigt sich auch im technischen und rechtlichen Setup der Überwachungssysteme (hier primär: Datenbanken), da die Behörden der Mitgliedsstaaten in den meisten Fällen die Kontrolle über die Daten und den Datenfluss behalten.

Das heißt nicht, dass die supranationalen Institutionen irrelevant gewesen wären. Beide politischen Netzwerke der Macht kooperierten oft miteinander, wenn es darum ging, Maßnahmen der Überwachung zu initiieren. Der Vertrag von Lissabon änderte die Machtbalance im Feld und brachte den EuGH ins Spiel, da er ihm die gleichen Aufsichtsrechte zugestand wie in anderen Politikfeldern und die Charta der Grundrechte der Europäischen Union ins Primärrecht überführte. Wegweisende Urteile bezogen auf das Grenzregime waren die Folge, zudem intervenierte der Gerichtshof mehrmals gegen Maßnahmen der Massenüberwachung und gestaltete damit das hier betrachtete Politikfeld entscheidend mit. Das europäische Parlament hingegen nutzte seine Rechte nur relativ selten dazu, Maßnahmen der Überwachung zu stoppen.

Es zeigte sich, dass ein von beiden politischen Machtnetzwerken getragener und oft vom Europäischen Parlament geteilter Konsens bezüglich des Ausbaus von Überwachungsmaßnahmen im Allgemeinen und Grenzüberwachungsmaßnahmen im Speziellen existiert. Dieser Konsens wird von dem gemeinsamen Interesse beider Machtnetzwerke an der Implementierung und Durchsetzung des Grenzregimes und am Ausbau ihrer infrastrukturellen Macht getragen.

Ein weiteres für die Fragestellung sehr wichtiges Machtnetzwerk ist das ökonomische Netzwerk der Macht. Im Falle des europäischen Grenzüberwachungsregimes gibt es einen spürbaren Einfluss des ökonomischen Machtnetzwerk im politischen Prozess. Die wichtigsten Akteure aus dem ökonomi-

schen Machtnetzwerk, bezogen auf das europäische Grenzüberwachungsregime, sind diejenigen Konzerne, die Überwachungssysteme im Grenzüberwachungsregime erforschen, bauen und implementieren. Dies sind vor allem Konzerne aus der Rüstungs- und IT-Industrie. Auf politischer Ebene kommen als Akteure ihre Lobbyorganisationen hinzu. Ein weiterer überraschender ökonomischer Akteur im Feld der Sicherheit sind Forschungsorganisationen. Sowohl die Rüstungsindustrie als auch Forschungsorganisationen sind bezüglich ihrer Einkommensquellen als auch ihrer Absatzmärkte besonders eng an das politische Netzwerk der Macht geknüpft. Forschungspolitik erwies als wichtiges Verbindungsglied zwischen Forschungsorganisationen, Rüstungsindustrie, nationaler Politik und EU-Politik. Akteure aus beiden politischen Machtnetzwerken sowie aus dem ökonomischen Machtnetzwerk bilden ein spezifisches Netzwerk, welches in dieser Arbeit als *surveillance special interest network* (Netzwerk mit einem besonderen Interesse an Überwachung) bezeichnet wird. Es vereinigt die Rüstungsindustrie, Teile der IT-Industrie, wichtige Forschungsorganisationen, europäische und nationale Sicherheitsbehörden, ihre jeweiligen Lobbyorganisationen, hochrangige Politiker und Beamte (sowohl auf nationaler als auch auf europäischer Ebene) sowie einige MdEPs und in begrenztem Maße Mitglieder des militärischen Machtnetzwerks.

Es gab und gibt eine Reihe de facto institutionalisierter Politikberatungsgruppen, in welchen Mitglieder des Netzwerks *policies* vorformulierten. Mitglieder dieser Gruppen waren und sind hochrangige Vertreter der relevanten Industrien, der Mitgliedsstaaten und der EU-Institutionen. Vertreter der Sicherheitsbehörden formen zudem ihren eigene Politikberatungsgruppen. Weitere wichtige Treffpunkte des Netzwerks sind *policy roundtables* sowie Waffenmessen. Die in diesen Kontexten und den entsprechenden Dokumenten erarbeiteten Vorschläge werden in der Regel nicht durchgehend durchgesetzt, allerdings wird ein relevanter Bestandteil dieser Vorschläge politisch umgesetzt. Dies gilt insbesondere für überwachungsbezogene Finanzierungslinien. Auf diese Weise finanzierte Forschung wurde oft zur Vorarbeit für konkrete Überwachungssysteme. Diese wurden wiederum oft von Firmen gebaut, die Teil des Netzwerks sind. Eine weitere wichtige Quelle für Einnahmen für den ökono-

mischen Teil des *surveillance special interest network* ist der Bedarf an Überwachungstechnik, der über den Bereich der Sicherheitsforschung hinaus durch das politische Netzwerk und durch die Erschaffung des europäischen Grenzüberwachungsregimes geschaffen wird. Zudem wurden EU-Mittel oft dafür eingesetzt, um Mitgliedsstaaten bei der Implementierung des Grenzüberwachungsregimes zu unterstützen.

Auf einer ideologischen Ebene wurde die Konvergenz von Interessen von einem allgemeinen Ausbau der Überwachung in den letzten 20 Jahren begleitet. Dieser politische Trend bezog sich auch auf die Grenzüberwachung, ging aber weit darüber hinaus. Er war sowohl auf europäischer Ebene als auch in den Mitgliedsstaaten festzustellen. Der Ausbau der Überwachung wurde von einem breiten politischen Spektrum unterstützt.

Es gibt aber auch ein Gegen-Machtnetzwerk, welches sich aktiv dem Ausbau der Überwachung widersetzt. Dieses wird in der vorliegenden Arbeit als *civil libertarian network* (bürgerrechtliches Netzwerk) bezeichnet. Es besteht vor allem aus NROs, Rechtsanwälten, politischen Aktivisten sowie einigen MdEPs. Dieses Netzwerk hat kontinuierlich gegen den Ausbau von Überwachungsmaßnahmen und Grenzüberwachungsmaßnahmen gearbeitet. Seine effektivsten Interventionen erfolgten auf dem Rechtsweg und hatten die bereits genannten EuGH-Grundsatzurteile bezüglich Massenüberwachung zur Folge.

All diese oben genannten Faktoren trieben den Ausbau der Überwachung und des Grenzüberwachungsregimes voran. Bezogen auf die Machtstruktur im Feld kann eine solide strukturelle Dominanz des *surveillance special interest network* über das *civil libertarian* network attestiert werden.

Glossar

ECRIS (European Criminal Records Information System) =
Europäisches Strafregisterinformationssystem

ECRIS-TCN = Europäisches Strafregisterinformationssystem für Drittstaatler

EEA = Einheitliche Europäische Akte

EES (Entry-Exit System) = Einreise- / Ausreise-System

ETIAS (European Travel Authorization and Information System) =
Europäisches Reiseinformations- und -genehmigungssystem

Eurodac = European Dactyloscopy

Europol (European police office) = Europäisches Polizeiamt

Eurosur (European border surveillance system) =
Europäisches Grenzüberwachungssystem

GEAS = Gemeinsames Europäisches Asylsystem

Interpol = Internationale kriminalpolizeiliche Organisation

PNR (Passenger Name Records) = Fluggastdatensatz

SIS II = Schengener Informationssystem II

VIS = Visa-Informationssystem

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Dedicated to my family

El sueño de la razón produce monstruos

(The dream / sleep of reason produces monsters)

Francisco Goya

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Contents

Chapter 1: Introduction

In recent years, there have been few issues in European Union politics that have been as controversial and divisive as the issues relating to migration. With the sudden mass influx on the Balkan route, known as the migration crisis in 2015, the issues concerning flight, refugees, irregular and regular migration shifted to the centre of the European debate. For a few months, the problems of the border regime where perceived not only as one set of issues troubling the EU, but as an existential threat to the very existence of the Union. The control of the border and the distribution of refugees among the member states were seen as a breaking point, at least until the EU-Turkey agreement and the decrease in numbers of refugees reduced the external migratory pressure (Kasparek, B., 2017a, pp. 38-51).

The underlying issues, however, are significantly older. Debates about migration, often passionate, have been going on since the 1980s (Kasparek, B., 2017b, pp. 1-29). These debates were accompanied by national policies aiming at steering, and in most cases restricting, immigration to Europe. Since the implementation of the Schengen area, the legal and technological political framework changed and a common border regime emerged (Kasparek, B., 2017b, pp. 1-29). This European border regime is defined as the sum of all laws, regulations, administrative rules, macro and micro policies, formal and informal practices, institutions, technologies, and artefacts used to uphold and protect the Schengen borders as well as the non-Schengen borders of the EU and control the flow of people and goods across it. It thus comprises the Schengen *acquis,* that is, the sum of all legal instruments and agreements that form part of the body of law, which implements the Schengen agreement. It also compromises the different legal instruments that together make the Common European Asylum System. It includes the different mechanisms, instruments, and agencies whose task is the protection of borders in a more narrowly defined sense, meaning physically protecting the border as well as the national and European agencies when they are tasked with implementing the

Common European Asylum System, the Schengen Agreement, and the protection of the common EU and Schengen borders.

Another set of issues that is often fiercely debated, in particular after Edwards Snowden's disclosures of the systematic mass internet surveillance through the NSA, especially in Germany, concerns surveillance, data protection, and privacy (Greenwald, G., 2014). In many cases, these debates have a European dimension to it. The political conflict over the data retention of communication meta-data did not only spark the constitutional complaint with the highest number of claimants in German history, it also was a political conflict about the implementation of a EU directive which, in turn, led to some landmark judgements of the CJEU (heise.de, 2016).[5] [6]

It can therefore be seen as an interesting fact that the European border regime and the emerging European border surveillance regime are only to some limited extent known among the general public (European Commission, 2018, pp.5-7, p.63)[7]. Which is in itself interesting, as the European border surveillance regime does not only concern refugees, but potentially everyone who crosses European Union and Schengen borders, including EU citizens, at least in some cases.

It is this technological regime, the European border surveillance regime, or the regime of surveillance technologies employed in the European border regime, which is at the heart of this thesis. It includes the different technologies and artefacts that are used to implement and uphold the European border regime

[5] See also chapter 5

[6] Directive 2006/24/EC of the European Parliament and of the Council of 15 March 2006 on the retention of data generated or processed in connection with the provision of publicly available electronic communications services or of public communications networks and amending Directive 2002/58, OJ L 105/54 (data retention Directive).

[7] According to a 2018 Eurobarometer survey 67 % of the respondents have heard of the Schengen area, 46 % know what it is, 52 % are aware of the introduction of internal border controls. However, only 26 % of the respondents are aware of any initiatives to secure the common borders. Of those 26 % respondents that are aware of any such initiatives 50 % are aware of the existence of Frontex, 22 are aware of the EES, 19 % are aware of the VIS, 17 % are aware of the SIS, 13 % are aware of the ETIAS and 10 % are aware of funding programmes such as the Internal Security Fund (European Commission 2018, pp. 5-7, p. 63)

by the means of technologies of surveillance. This ranges from complex meta-surveillance systems such as Eurosur (European border surveillance system) to a host of databases such as the Schengen Information System II, the Visa Information System, or the Eurodac (European Dactyloscopy) database to classical surveillance technologies such as surveillance air-crafts. Surveillance technologies are in turn defined here as any technologies that help monitor, register, make readable, predict, analyse, and assess people, animals and things, their relationships and behaviour. They can include or be related to elements of active control, steering, and decision-making, which, however, is not necessarily the case.

The ensemble of surveillance technologies employed at the European borders experienced a truly remarkable growth during the last two decades. When the Schengen Information System (SIS), the predecessor of the current SIS II, which is still at the heart of the border surveillance regime, went operational in 1995, it contained less than 3 million datasets (Die Welt,1995). In 2018, the SIS II contains more than 82 million of these alerts, and these datasets have been researched more than 6 billion times in 2018 alone (EU-Lisa ,2019). The future EU travel authorization system ETIAS (European Travel Information and Authorization System) will potentially affect up to 1.2 billion people Chapter 1 (Dumbrava, C., 2017, p. 23). The technological quality has changed as well. Back in the 1990s when the border surveillance system took root, mass profiling system as the PNR (Passenger Name Record) Databases, and high-tech multi platforms surveillance systems such as Eurosur were still science fiction. These are only some of the systems in the European border surveillance regime.

The growth of the emerging European border surveillance system raises questions of its character and its effects. Its size, interconnectedness and complexity create a powerful system of systems, which has at least the potential to actually control not only the flow of people across the Schengen borders, but also has effects on privacy and the freedom of movement of EU-Citizens, third country nationals, and refugees beyond the border regime itself. Given its capabilities, it also has at least the potentials to become the sort of encompassing

surveillance mechanism theorized as panopticon by Michel Foucault (Foucault, M., 1995/1975, pp. 195-228). The development of such a European border surveillance regime itself is inextricably linked with the growth of digital technology in the last few decades. The securitisation through surveillance of the border regime can therefore also be conceptualised as a digitalization and algorithmisation of the border regime. This means that digital technologies of surveillance have become an integral part of the border regime. It the meantime, the terms algorithmisation here also designates the discernible tendency to shift processes of risk assessment and decision-making related to the border into systems of surveillance, using big data-based methods of surveillance, sorting, and scoring. One of the main aims of this thesis is to analyse how far the process of the securitisation through surveillance algorithmisation of the border regime has advanced and what the effects are.

This leads us to our research question, which is:

Are the European border regime and the European border surveillance regime turning into an algorithmic panopticon?

The rise of such a potentially panoptic algorithmic regime of border surveillance raises many follow-up question (which by themselves are not research questions).

Who exactly is the target of the surveillance? What is the extend and depth of the surveillance? What is the precise purpose of the surveillance? Are the specific measures and technologies, such as increasing interoperability or introducing biometrics, efficient and appropriate? Who funds the systems, who is building the systems, who runs the systems? Who resists the systems of surveillance, and why? How successful is this resistance? Who sets the limits of the systems growth? If member states cede sovereignty trough the creation of a shared border surveillance regime, how much sovereignty do they cede, and what do they get in return?

This list of questions is just exemplary of possible questions and not exhaustive. What all these questions have in common though, besides the fact that

they are suitable questions for technology assessment, is that they are questions of politics and policy.

In this thesis politics is defined, following H. D. Lasswell's definition, as "who gets what, when, how" (Hill, M. , 2005, p. 13). Getting what, when, how includes material gains as much as normative aims, interests, and values.

Policy is a term that is notoriously difficult to define, and has been defined including anything from law-making to purposeful non-action (Hill, M., 2005, pp. 6-15). An established definition of policy, defines it as "a set of interrelated decisions concerning the selection of goals and the means of achieving them within a specified situation" (Hill, M., 2005, p. 7).[8] Following up here and on Lasswell's definition of politics, policy is defined in this thesis as the means and methods of deciding of who gets what, when, how. Consequently, to vary the cited definition, policy means a set of interrelated political, legal, and technological decisions deciding on whose material interests, political goals, norms, and values prevail, and when and how they are achieved, implemented, and enforced.

Approaching policies from such an interest and even conflict-focused angle means taking into account not only the policy content, but also the actors and broader structures that decide upon them. It makes therefore power and power structures central to the question at hand.

Power is, as Michael Mann succinctly puts it, "the capacity to get others to do things that otherwise they would not do" (Mann, M., 2013, p. 1).

Power does not exist in a social vacuum; it is part of a societal structure in which it is rooted. A power structure in turn can be defined as follows:

"A 'power structure' is a network of organizations and roles within a city or society that is responsible for maintaining the general social structure and shaping new policy initiatives. A 'power elite' is the set of people who are the individual actors within the power structure. Because the social order main-

[8] Definition by W. I. Jenkins (1978), quoted in Hill, M. (2005, p. 7)

tained by the power structure is a stratified one, with great inequalities of wealth and income, a power structure is also a system of organized domination and the power elite often will use intimidation and coercion on its critics and opponents if necessary." (Domhoff, G. W., Dye, T. R. (eds.), 1987, p. 9)

Seen this way, the puzzle is therefore not that much about the question as to which abstract factors drove the extension and algorithmisation of the European border surveillance regime, but rather about which concrete actors and power structures were the driving factors and why. What are the interests, aims, and goals that are pursued by building such an ensemble of mostly digital border surveillance systems, and what should these systems achieve? What is the political functionality of these systems?

When approaching the issue it is necessary to remember that the European border regime and the European border surveillance regime are initiated, implemented, governed, and enforced as part of a highly complex polity encompassing 28/27 national states, a unique set of intergovernmental and supranational institutions, economic actors, and a populace of more than half a billion people.

These are the actors that constitute the power structures and make policy in the EU. Their power relations, interests, aims, norms, and values drive the creation of the European border regime and its technological surveillance regime.

Another aspect is that surveillance technology is in itself a locus of power. As a means of control, it reproduces power relations, but it also has the potential to change them. Furthermore, it also creates new ones. For example, both border guards and algorithms in border surveillance systems may be employed to enforce the same policy. However, neither are they the same, nor is the process of decision-making the same. The introduction of a border surveillance system that systematically screens the retained data of masses of travellers for risk factors such as ETIAS might actually be a new policy, and furthermore a new form of (algorithmic) decision-making, and thus a novel locus of power. It is thus sensible to analyse the emerging border surveillance not only as the implementation mechanism of policies but also as a power structure of its

own. Which then raises the question of the relationship between those two power structures.

To summarize the research issue and repeat the main research question, the latter is:

Are the European border regime and the European border surveillance regime turning into an algorithmic panopticon?

This main research question is underpinned by a number of sub-research questions. These are:

What are the specific role, the specific function of surveillance technologies in the European border regime, and the potential algorithmic panopticon at the Schengen borders?

What are the power structure and its sources of power in the European border regime and the European border surveillance regime?

What is the relation between these two enmeshed power structures?

How is power manifested, produced, and reproduced in these two structures in general and in the European border surveillance regime / the potential algorithmic panopticon in particular?

This thesis therefore interweaves an analysis of the border regime and the European border surveillance regime, power structures, and the power of surveillance.

The answer to the research question is developed in four different chapters. The chapters each have a different focus, however, they are interwoven with each other and together build the argument.

Chapter 2 is an introduction into the border regime as well as the border surveillance regime. It introduces the basic contradictions of the border regime which has to double as a European migration regime. Such a European migration regime would be needed in order to solve the basic policy problems underlying migration to the EU. It provides an oversight of the pre-history and

the history of the Schengen area. It also gives an oversight of the EU policy domain into which the border regime is embedded (EU Justice and Home Affairs, abbreviated JHA). This includes its history as well as its legal and institutional setup. The Dublin regime as well as the Common European Asylum System which are the most important legal frameworks of the border regime, will be analysed. This encompasses the JHA five-years programmes, from Tampere over Hague to Stockholm (covering a time span from 1999 to 2014), as these were important policy frameworks for the development of the JHA field, the border regime, and the border surveillance regime. They also show that the development of the border surveillance regime is a long-term strategy. The chapter will discuss integrated border management as a crucial techno-political concept within the border regime. The strategy of externalization as a crucial, if not the most crucial, element of the border regime will be discussed as well. The chapter concludes with discussing the long crisis of the border regime and its culmination in 2015. Content analysis of legal instruments and policy documents are some of the methods used in this thesis, and in particular in this chapter.

Theory is another important tool for answering the research question. Therefore, the subsequent chapter is the theory chapter. It will first introduce Michael Mann's networked theory of power (Mann, M., 1986/2012, 1993/2012, 2012, 2013). Subsequently G. W. Domhoff's version of power structure research and his policy theory of elite power will be discussed (Domhoff, G. W , 2014). These two frameworks in combination form the theoretical framework of analysing power structures and political power in this thesis. The subsequent section discusses Michel Foucault's theories on disciplinarian and panoptical surveillance, which are used to explain the form of power created through the surveillance regime (Foucault, M., 1995/1975). They are presented and theoretically applied on the digital present and the European border surveillance regime. In a next step Mann's and Domhoff's common framework is applied to the European Union, the border regime, and the border surveillance regime. On that basis, linking up to the research question, the guiding questions and hypotheses for the two following chapters are formulated.

Chapters 4 and 5 form a two-step argument. Chapter 4 delineates the European border surveillance regime. It presents its history, the most important existing databases and surveillance systems as well as the most important planned databases, surveillance systems and policy initiatives, including the trend towards interoperability. It discusses the technological, legal, and political properties of these systems and comes to a first assessment of the overall systems in the light of the guiding research questions and the hypotheses formulated in chapter 3.

Chapter 5 continues here while linking up to chapter 3 as well. It is more analytical in nature and applies the theory of power through surveillance that was formulated in chapter 3 and already applied in the abstract, modifies it to a theory of indirect panoptic surveillance and applies it to the concrete case of the European border surveillance regime and the technologies discussed in chapter 4. It thus examines the forms and effects of power in the border surveillance regime. In doing so, the chapter also discusses the major qualitative shifts that mark the transformation of the European border surveillance system from a relative limited and targeted system of surveillance to an interoperable system of mass surveillance using biometrics, preventive forms of surveillance, big data, and automated decision-making. Chapter 5 also links back to chapter 3 in discussing political power and power structures by looking into the political power structures that initiate and profit from the policies created by the border system. The interviews are cited where appropriate. The Chapter will also analyse the counter-structures that actively resist the border system. Besides academic literature, content analysis and legal analysis, 14 interviews with experts and stakeholders from the field supplement the material (see appendix) have been conducted, which are of particular importance for chapter 5. Each chapter (except for the conclusion) ends with a concise concluding section summarising its findings.

The last chapter, the conclusion, repeats and summarizes the findings and arguments of the thesis.

Chapter 2: Treaties, policies, and border building – the history and development of the European border regime

As stated in the previous chapter, the research subject of this thesis is the relationship between political power, power structures, policy-making, policies and surveillance technology in the European border regime and the unfolding European border surveillance and database regime.

As the arguments in the next three chapters are interconnected and build upon another, they will be shortly layed out in the next paragraphs.

The starting point of the argument is that at the heart of the European Border Regime lays a contradiction. It is the contradiction between a needed economic openness towards immigration on the one hand, and the creation of a border regime consisting of the Schengen and Dublin regimes and the Common European Asylum System, which are driven by concerns about the effect of migration and focus on sealing off against it, on the other (Bricker, D., Ibbitson, J. 2019, pp. 55-74, pp. 139-156, Kasparek, B., 2017b, pp. 27-29). In the meantime, the European border regime is being used as a tool for the regulation of migration in the changing tides in European migration policy, a filter in lieu of a coordinated European migration policy. The process of creating the Single European market and the Schengen Area caused fears of increased security issues due to open internal borders in conjunction with continuous and (temporarily massively increasing) migratory pressures which led to the desire by European policy elites (and significant parts of the European population) to create a European border regime. Surveillance technology mostly in the form of a still growing, increasingly interconnected database regime, but also in the form of other kinds of (mostly digital / algorithmic) surveillance technologies,

most notably Eurosur[9], plays an increasing role in the overall border regime, and is not just an add-on to the border regime but a crucial element. Both the creation of the regime and the use of surveillance technology as a part of the regime are the attempt to answer to a difficult policy problem in which neither complete open borders nor a complete sealing off of the borders is a realistic option.

At the same time, the boundary conditions alone are not sufficient to understand policy-making regarding surveillance technology in the European border regime, and it is necessary to look into the policy processes that lead to the emergence of these policies. Analysing policy processes is intrinsically bound up with power struggles and powers structures. Both have a significant influence on the outcome of policy-making processes. Thus, it is necessary for understanding the emergence of a digital / algorithmic / surveillance-based border regime to take the institutional setup, power structures, and power struggles into account. This includes an institutional setup, actors' interest and agendas, as well as the structural dominance of different networks of power in a given polity or policy field and the struggles among actors about policy. Examining surveillance technology, it is worthwhile to look into the effects of its employment, considering the way it creates new power structures and relations of power and upholds old ones.

Concerning the networks of power, it is argued that the extension of border surveillance was also driven by a strong actor network with an interest in their extension revolving around the member states and the EU's security apparatuses, the defence industry, and specific sectors of academia. On an institutional level it was also influenced by a certain independence of the security sector of the state, its executive branches which, due to the informal and intergovernmental set up of the JHA field, gained an independence and freedom of manoeuvre vis-à-vis the judiciary and the legislative branches of EU govern-

9 Eurosur is multi-source, multi-platform surveillance system combining the different sources of border intelligence from the member states, ship tracking, satellite surveillance and other form of surveillance to create a common picture on the situation on the common borders.

ance that do not exist in other fields of EU policy. Concerning the effect of surveillance, it can be argued that the different surveillance databases and surveillance systems of the European border surveillance regime constitute to a partly automated, partly biometric big data mass surveillance system with an increasing tendency to apply pre-emptive and preventive forms of mass scoring and sorting[10]. Together they create a form of indirect panoptic power.

Driven by the aforementioned factors, the emergence of an algorithmic, primarily data-based border surveillance regime can be observed. It has a tendency towards function creep, being used for purposes for which it was not intended for. Together with the tendency to interconnect the databases powerful surveillance regime is emerging at Europe's borders.

Before taking a theoretical look into power structures that drive policy-making concerning the employment of surveillance technology in the European border regime (chapter 3) to then have a look at the border surveillance / border database regime itself (chapter 4) and in the end apply the theory to the concrete case at hand (chapter 5), it makes sense to delineate the border regime and its historical development (chapter 2). Thus, the pattern of argumentation begins by describing the historical development of the framework regime (the European border regime), and the boundary conditions.

2.1 The origins of the European border regime

The European Border regime and its development cannot be separated from the policy domain, that is the field of policy of European Union politics it is attributed to. This is the field of EU Justice and Home Affairs (also known as Area of Freedom, Security and Justice). Migration policy and border control are an integral part of the field and indeed one consistent main driver for its

[10] Social sorting, often shortened to sorting is a term coined by the sociologist and surveillance studies scholar David Lyon which denotes the permanent classification of populations by algorithms using personal and collective data which is turn effects their life chances and possibilities (Christl, W., Spiekermann, S., 2016, p. 9).

development, together with economic integration (which was especially important pre-Maastricht) and the fight against terrorism (which gained traction post 2001). Policy-making in the field cannot be understood without understanding the complex decision-making architecture and shifting balance of power between member states represented in the Council of Ministers in the European Council and the supranational Institutions (the Commission, the Court of Justice, and the European Parliament), which for a long time differed significantly from other fields of EU policy. Thus, delineating, the political and legal framework along with the most important policies is needed in order to understand the role surveillance technology plays in it, and the policy processes that drive it. Thus, in this chapter is an attempt to describe the history of the European border regime as intersecting with other aspects of the JHA domain, as well as its most important polices and characteristics and its political phenomenology. The chapter will keep a rough chronological order while also following a heuristic , going from the more general fields of law and policy to the specific (sometimes entangling chronology and seniority will be unavoidable). It starts with the political and economic situation that led to the creation of the Single European Market and the Schengen Area and its implementation. A description of the development of the primary law of the JHA field will follow. The development of the Dublin regime and the Common European Asylum System and its advancement through the Tampere, Hague, and Stockholm Programmes as well as on other security aspects of the European border regime contained in these policy frameworks up to the partial collapse of the Dublin regime in the refugee Crisis 2015 will be discussed. The development of an integrated border management will be, together with other policies, in particular the long-standing policy of the externalization of borders, analysed.

The development of the European border regime often happened in bounds and leaps, sometimes caused by external pressures. Its history is one of discontinuities as well as one of surprising policy persistence. Both are necessary to understand the role of surveillance policies in the field, and this chapter will therefore attempt to highlight both aspects.

Before continuing, a definition of the European Border Regime may be useful:

The European border regime is here defined as the sum of all laws, regulations, administrative rules, macro and micro policies, formal and informal practices, institutions, technologies, and artefacts used to uphold and protect the Schengen borders (as well as the non-Schengen borders of the EU) and control the flow of people and goods across it. It thus comprises the *Schengen Acquis*, that is, the sum of all legal instruments and agreements that form part of the body of law which implements the Schengen agreement. It also comprises the different legal instruments that together make the Common European Asylum System[11]. It includes the different mechanisms, instruments, and agencies whose task is border protection in a more narrowly defined sense (e. g. physically protecting the border), most importantly Frontex. It also includes the different technologies and artefacts that are used to implement and uphold this regime. This ranges from complex surveillance systems such as Eurosur, a host of databases, to simple artefacts such as fences.

2.2 The Single European Act and the completion of the internal market

The roots of the European border regime go back to the process of European economic unification in the late 1980s and early 1990s. Right from the start economic policy, freedom of movement in the (pre-Maastricht) EC, security policy, fighting cross-border crime and hindering illegal immigration as well as technologies of surveillance were inextricably linked.

The 1970s found the EC in heavy water. It was economically hit hard by the end of Fordist economic models and Keynesian economic policies and the first oil crisis. Institutionally the EC was hindered by an outdated governance structure. Its political inefficiencies were increased by the (1965) Luxembourg

[11] The revised Asylum Procedure Directive, the revised Receptions Conditions Directive, The revised Qualifications, the revised Dublin Regulation (also called Dublin III) and the revised Eurodac Regulation. (DG Migration and Home Affairs, 2016)

compromise whose de facto veto rule on any issue touching on substantial interest of the member states also meant a permanent relative stalemate on major policy issues and the growth of the community (Dinan, D. , 2004, pp. 104-108). Intense intergovernmental budgetary conflicts, especially between the UK and the other members of the community, did not promote the Union's progress either (Dinan, D., 2004, pp. 181-189). Although there were major institutional innovations, most importantly the introduction of the European Council in 1974 and the first direct elections to the European Parliament (in 1979), they increased rather than diminished the impression of the inadequacy of the institutional setup (Blair, A., 2006, pp. 177-178). The same situation applies concerning the accessions to the Community (UK, Denmark, and Ireland). After the end of the regime of the Colonels in Greece (1974), Salazar's authoritarian regime in Portugal (1974), the Francoist variation of fascism in Spain (1975), and the respective transition periods to democracy, Greece, Portugal, and Spain joined the EC in 1981 (Greece) and 1986 (Spain and Portugal, respectively). The European Community experienced an upswing in the mid-1980s, pushed by a more positive macroeconomic climate, while the institutional problems lingered on (Dinan, D., 2004, pp. 177-178, pp. 185-192). While there was anything but unanimity on the exact path of further European integration among leading political figures such as Margaret Thatcher, Francois Mitterrand, Helmut Kohl, or Jacques Delors, there was a certain consensus that something needed to be done to further the economic progress for a community of states facing increasing competition from other parts of the world. The result (after the first intergovernmental conference since decades) was the biggest treaty revision since the foundational 1957 Rome treaty: the Single European Act from 1985, although probably few of the policy-makers that made that deal after tough intergovernmental haggling would have imagined the shifts in policy caused by its sober technical and legal content (Dinan, D, 2004, pp. 206-217). It broke the logjam on policy progress by normalizing Qualified Majority Voting[12] in the Council and strengthened the European

[12] The negotiation / consensus-based culture of the EU, however, has the effect that QMV is not invoked that often, at least not on issues of great importance and sensitivity.

Parliament by introducing the (now almost completely out of use) Cooperation Procedure.[13] Most importantly, it stipulated the realization of the internal market until 1992, including the free movement of persons, which in principle, along with the free movement of goods, services, and capital (which together form the so-called four freedoms) has been part of the European treaty framework since its inception. This date and vision enthused both the public and decision-makers, in particular the "Delors Commission" which, through the means of a by now legendary White Paper[14] containing about 300 different measures set to the task to realize the common market. The discussion on the free movement of persons inside the European Community was further instigated by an influential report on the common market by the Italian economist Pablo Cecchini (the so-called Cecchini report). He argued for abolishing internal border controls, calculating that they would cost the EC member states' economy up to 8 Billion ECU[15] (Baumann, M. 2014, Dinan, D., 2004, pp. 206-229).

2.3 The Schengen Agreement

However, while the freedom of goods and capital in the common market was about to be realized, there was little progress regarding the free movement of people across the EC's borders. In order to move the issue ahead, France, Germany, the Netherlands, Luxembourg, and Belgium signed the Schengen Agreement in 1985. The initial Schengen Agreement was an intergovernmental agreement outside the Treaty Framework, which allowed Liechtenstein, Island and Norway, and Switzerland to join in 2011, 1996 and 2004 respectively (Auswärtiges Amt, 2019). It was in principle an agreement on realizing the free movements of people across borders inside the future Schengen area and,

[13] This gave the EP two readings and a right to reject a legislative proposal, with the council only able to override such a rejection with unanimity.

[14] European Commission (1985): "Completing the European Internal Market" COM (85) 310, final, Brussels

[15] The ECU was a basket of currencies and the predecessor of the Euro.

crucial for this subject, the duty to protect the common borders followed from this accord. The UK, Ireland, and Denmark, however, stayed aloof, citing security precautions (Dinan, D ,2004, p. 220).

Legal and technical difficulties, however, lead to the postponing of the signing of the Schengen Convention, which meant that freedom of movement across EC borders was only applied concerning custom formalities, goods, and services, and it took another five years, until 1995, to finally fully implement it. Only then border controls among signatory states were actually abolished. One of the reasons was that the first version of the Schengen Information System (SIS I, which will be discussed in detail further below in chapter 4), the functioning of which was considered a crucial pre-condition of actually implementing the end of border controls, was not ready. Portugal and Spain joined in 1991, Greece in 1992, Austria in 1995 (Auswärtiges Amt, 2019).

Also in 1997, with the Treaty of Amsterdam, The sum of legal rules concerning Schengen, the so-called *Schengen Acquis*, was incorporated into the body of EU Law, the *Acquis communautaire*, and only after the implementation of that treaty (the Treaty of Amsterdam), it became a full-fledged EU policy (Craig, P. P., De Búrca, G. 2015, p. 966). Member states' precautions and concerns about sovereignty and giving up control of politically sensitive areas were factors shaping the Schengen Agreement and lead to an explicitly complicated development and legal framework. To this day, some Schengen member states are not members of the EU, while some member states of the EU do not apply the Schengen Convention at all or only partially.

2.4 The policy domain of Justice and Home Affairs (the Area of Freedom, Security, and Justice)

In order to understand the political development of the European border regime and Schengen it is useful to explain the political framework into which

the Schengen Convention is embedded. With the treaty of Amsterdam, Schengen became part of the policy that is the European Union's Justice and Home Affairs domain and with it the primary law that governs the vast bulk of migration and surveillance related measures. Understanding this framework is also crucial for understanding the power structures and power struggles that shaped the border surveillance regime of the EU (which are the subject of chapter 3, as far as a separation of subjects is possible).

The roots of the JHA domain are to be found in the informal and intergovernmental cooperation between Interior Ministries and Police Departments, with the TREVI Group (also known as the TREVI Process),[16] concerned with the fight against left wing terrorism as a starting point. Some of the structures from these early days of European Justice and Home Affairs, such as the Police Working Group on Terrorism, still exist despite the fact that their raison d'être (left wing terrorism) became but a marginal problem (Interview with ASc.S). Later it also became a crucial forum for deciding migration policy (Kasparek, B., 2017b, p. 18). Pre-Maastricht, security cooperation among the EC states was an issue which stayed on the back seat of policy issues. It was conducted in an informal fashion, often clouded in a shred of secrecy and out of the reach of the European Parliament, national courts, and the European Court of Justice (Nugent, N. 2006, p. 367-370).

This lack of scrutiny and the intergovernmental and informal character of the field were maintained (to a decreasing degree) up until the Treaty of Lisbon was implemented. And it is worth to keep this in mind when discussing later development as it supported the prevalence of national and executive interests over other aspects such as privacy and human rights. Those were mostly championed by other actors, notably some NGOs, parts of the EP and the Court of Justice once it started to fulfil its role as a reviewer of law in the field, as well as the European Court of Human Rights.

[16] TREVI stands for: Terrorisme, Radicalisme, Extrémisme, Violence Internationale

With the treaty of Maastricht, EU policies and EU law were divided into different legal and political domains, the so-called pillars. The EEC Treaty was renamed EC treaty,[17] and the bulk of the existing treaty framework (which included the EC Treaty, the ECSC,[18] and the Euratom treaties) was categorized into the first pillar in which the full supranational mode of decision-making applied. That means that because of the application of Qualified Majority Voting proposals could not be vetoed by member states in the Council anymore and that the EP, through the newly introduced co-decision procedure (nowadays being the standard decision procedure in almost all cases and called the ordinary legislative procedure), could co-shape and veto legislative proposals. That was not the case with the other two pillars. The first pillar was also the place in which rights concerning mobility and residence for European citizens, be it in their capacity as workers, service providers or entrepreneurs, or family members, were located. The same goes for the rights to mobility and residence tied to European citizenship.[19]

The second pillar (Common Defence and Foreign Policy) was concerned with foreign policy and the nucleus of a European defence policy.[20] The third pillar then institutionalized the existing policies on police cooperation and also on border protection (without the Schengen *acquis*, which was not part of EU law yet). The nascent JHA Affairs domain included: asylum policy, rules on external control, immigration and residence of third country nationals, drug policy,

[17] Commonly abbreviated Treaty on the European Community or TEC

[18] The ECSC (European Coal and Steel Community) being the only European treaty that is expired

[19] This is a huge a complex field of law and it will will only be touched upon as far as it is relevant for dealing with the European border regime which is from the perspective of this thesis mostly concerned with migration and in particular with fending off irregular migration. At this point of the thesis Article 45 TFEU (Treaty on the Functioning of the European Union, the name of the TEC after the Lisbon treaty), dealing with freedom of movement for workers and Articles 49 and 56 TFEU (freedom to provide Services) as well as Article 20 TFEU (Union citizenship) and Directive 2004/39 (Right to free Movement for EU citizens and their families also dubbed the Citizens Rights Directive) deserve to be mentioned.

[20] Pillar Two and Three made up the Treaty on European Union abbreviated TEU. TEU and TEC were divided in seven chapters. The JHA provisions were to be found in the chapter VI of the Treaties (Craig, P. P., De Búrca, G. 2015, p. 965)

judicial cooperation, the foundation of Europol, judicial cooperation in criminal matters, and fighting international fraud (Nugent , N. 2006, pp. 367-370).

Decision-making mechanisms stayed largely intergovernmental. The major players were the national administrations, the Council of Ministers in its JHA Configuration, and particular Coreper II) [21]., and a high-level committee (the so-called K 4 Committee) coordinated decision-making (Craig, P. P., De Búrca, G., 2015, pp. 965-966).

In JHA the Commission was not playing its full role as the primary initiator of legislation, and the European Parliament was largely left out.[22] Furthermore, the policy domain was largely out of the reach of the CJEUs Jurisdiction, with similar rules concerning specific rules on migration and asylum.[23] Core principles of EU law were only applied in limited fashion in the third pillar[24] (Craig & De Búrca 2015, pp. 964-972). The UK decided to opt out of many important JHA provisions, but not all, via a complicated protocol mechanism, while Ireland follows a similar rule[25] and Denmark decided to opt out from

[21] Coreper is the abbreviation of the Council of Permanent Representatives which is the highest formation in the hierarchy of the council of Ministers after the actual Council of Ministers and does prepare the majority of the decisions. It meets on a weekly basis. There are two formations of COREPER (I and II) of which COREPER II is the more senior one which also is dealing with JHA affairs as they are considered particularly sensitive.

[22] The Opinions of the EP were to be "taken duly into consideration" and the Commission was to be "fully associated" being able to propose initiatives to the Council who would take the up and act unanimously on them (Craig & De Búrca ,2015, p. 965-966)

[23] There were limits on legality review and the CJEU could only deliver preliminary rulings if the concerned member state had made a declaration accepting them. Furthermore, no enforcement actions (by the Commission) were possible. The relevant articles were Article 35 TEU and Article 68 (1) TEC (Craig and De Búrca 2015, pp. 976-977).

[24] Framework decisions, the most common legal tool in the area had, according to Article 34 (2) TEU, no direct effect. The applicability of supremacy was debated but not tested in court (Craig P. P, De Búrca . G., 2015, pp. 976-977)

[25] The post-Treaty of Amsterdam protocol, maintained by the Lisbon Treaty, signified an opt out from Schengen for the UK and Ireland but allowed a selective opt- in if the other member states agreed unanimously. The UK maintained its control over its borders. Regarding to JHA /AFSJ they maintain a position of flexible opt-ins and opt -outs. The relevant protocols to the Lisbon Treaty are the Protocols Nr. (20) On the Application of Certain Aspects of Article 26 of the TFEU, Protocol (No 21) On the Position of the UK and Ireland in respect to the ASFJ and Article 10 (4) of Protocol (No. 36) on Transitional Provisions.

JHA after a 1992 referendum, with a proposal to go for similar solution as the UK and Ireland being rejected in 2015 by popular referendum (Peers, S. 2014, Peers, S. 2015). However, Denmark participates in the Schengen area and the Dublin rules (and some other measures of asylum law).[26]

With the treaty of Amsterdam, large chunks of JHA and home affairs were shifted into the first community pillar and thus put into the reach of the European Parliament and the CJEU (only Police and Judicial Cooperation remained in the third pillar).[27] With the Amsterdam Treaty also came the decision that the European Union should constitute an "Area of Freedom Security and Justice", which was an important step towards creating a more coherent policy domain out of the European Union's Justice and Home Affairs, while putting it more prominently on the EU policy agenda, with immigration as one of the core concerns (Craig, P. P., De Búrca, G. 2015, p. 966). The Treaty of Nice only added little changes to the field of JHA affairs, as it was mostly concerned with institutional matters (Nugent, N., 2006, pp. 104-112).[28]

The Lisbon Treaty had a significant effect on the Field of JHA affairs, while largely following what was planned for this policy domain in the not realized Constitutional Treaty. It finished with the process of de-pillarization and thus abolished the third pillar.[29] That also meant that the co-decision procedure was fully implemented and after a short transition period regarding some exceptions, the CJEU has full jurisdiction now. The importance of the ASFJ/JHA policy domain was enshrined through Article 67 (1) TFEU, while Article 68 TFEU formally acknowledges the role of the European Council in policy formulation (Craig, P. P., & De Búrca,G., pp. 972-979).[30]

[26] While Denmark does not take part in these measures as part of EU law, it does via the means of international law. Denmark is bound by measures on police and judicial cooperation adopted before the Lisbon Treaty, but has an opt out for measures adopted after the Lisbon Treaty. The relevant Protocol is the Protocol Nr.22 (to the TFEU and the TEU) on the position of Denmark (Peers, S. 2014, Peers, S. 2015)

[27] They were categorized under Title IV of the Treaties.

[28] Concluded 2001, implemented in 2003

[29] The Provisions on ASFJ are now to be found in chapter three part V TFEU.

[30] The new, still valid name for the TEC.

Another major point was the incorporation of the European Charta of Human Rights into the Union's primary law, which had marked effect on the case law of the CJEU. The CJEU issued a number of landmark decisions on privacy and surveillance. The CJEU severely curtailed the possibility of mass surveillance in general, but could also strongly limit drag net surveillance in the context of the European border regime. This concerns for example the collection of passenger data, so-called PNR (Passenger Name Record) data, as expressed by a recent opinion of the Court of Justice, which also calls for significant safeguards regarding automatic processing.[31] Some observers argue that the reasoning of this opinion could also be used as a legal basis for bringing down the Entry/Exit System, as it was argued in recently commissioned legal study by the Green / EFA Faction in the European Parliament (Cole, M. D., Quintel, T. 2017, p. 1-3).

Prime among political events that shaped the development of the European border regime was the 2004 eastern enlargement of the European Union. The Czech Republic, Cyprus, Estonia, Hungary, Malta, Poland, Latvia, Lithuania, Slovakia, and Slovenia joined the Union and joined the Schengen Agreement in 2007 (with the exception of Cyprus which is not supposed to enter the Schengen Agreement until the there is a solution to the Cyprus conflict). Croatia (which has joined the Union in 2013) is not yet a member of the Schengen Area, neither are Bulgaria and Romania (which joined the Union in 2007). However, while the latter two's accession to the Schengen area is blocked by the other Member States (notably the Netherlands), Croatia has a realistic chance of joining in due time (Morgan, S. ,2017).

While primary law provides the framework for both JHA and Asylum / migration policy[32] and sets the framing for decision-making, the gist of the

[31] Court of Justice of the European Union (2017).Opinion 1/15, Draft agreement between Canada and the European Union on the transfer and processing of Passenger Name Record data), last retrieved online 24.09.2019 via: http://curia.europa.eu/juris/document/document.jsf?text=&docid=193216&doclang=EN

[32] Title V TFEU (Articles 67-89), also Article 3 (2) TEU, and Article 2(2) TFEU are of relevance.

law that governs the European border regime is to be found in secondary law, in particular in the acts that together make up the Common European Asylum System (CEAS) with the Dublin Regulation at its core.

In the time-frame from 1999 to 2014, the European Council acting on the mandate in the Amsterdam Treaty became central for policy-making in the JHA domain. The European council set the framework for policy-making by issuing 4-year policy programmes for the field of Justice and Home Affairs (1999-2004, 2005-2009, 2010-2014), named after the cities in which the relevant summits took place (Tampere, The Hague, and Stockholm). From 1999 onwards these programmes also set the framework in which the development of the secondary legislation, the common European Asylum System, whose development began earlier with the Dublin Convention, took place.

2.5 The Dublin Convention and the development of the Common European Asylum System

The prehistory of the European border regime is an economic one. In the Western European boom years from the 1950s to the mid-1970s, many Western European states followed a policy recruiting migrant workers for badly paid jobs. With the end of the boom in the mid-1970s these policies were stopped, while the increase of actual numbers of refugees from outside Europe (a relatively new phenomenon) was met with the securitisation of all aspects of migration policy, concerning both refugees and migrant workers (Kasparek, B. 2017b, pp. 13-17). This established a pattern that continues to this day.

Creating Schengen, an area free movement inside Europe was the process of creating a common fortified border regime, as well linked with creating a common asylum system, substitutes for a common European migration policy.

Already when discussing Schengen, member states were discussing the issue of a common framework for migration policy and how to attribute the responsibility for applicants, (European Asylum Support Office & International As-

sociation of Refugee Law Judges, 2016, p. 21). The result was the first Dublin Convention. It was signed in 1990, but it took until 1997 until it went into effect (Kasparek, B., 2017b, p. 21). The core of the Convention was and is the rule, that the member state in which a refugee arrives and lodges his application is also responsible for processing the application and hosting the refugee, with some exceptions concerning visas and visa-waivers.[33] Refugees do not have the right to choose their host country beyond the framework of these rules. The core rules survived the several legal metamorphoses of the Dublin system until today; and its details, its application and non- application were and are a perpetual bone of contention among member states. The Dublin Conventions rules of responsibility of dealing with a claimant started to create a de-facto system of concentric rings around the western European "core countries"[34] which would be "safer" from the influx of refugees than those of the periphery simply by being located where there are located. This system was later factually expanded through the externalization of European borders. The relation between the Schengen Agreement and the Dublin Convention is an intimate one, the significant rules on responsibility to register and accommodate refugees were taken over from the Schengen (II) agreement into the Dublin convention (Kasparek, B., 2017, pp. 20-21).

The first test for the Dublin convention came when the fall of the iron curtain and the Yugoslav war led to a mass influx of refugees from the Balkans and Eastern Europe into EC member states and other Western European states. The numbers challenged the assumptions and projections on which the early version of European border regime was built upon. Germany, for example, had 99 650 claimants for asylum in the year 1985, upon which Schengen was decided. By 1990, the year when the Dublin Convention was created, the numbers had increased to 193 000, and by 1992, to 438 191 claimants (Bundeszentrale für politische Bildung, 2017). The numbers sparked a heated debate (which had its predecessors in the 1980s) and enmeshed topics of German cultural identity, political asylum, German law on nationality and migration in

33 The practical application and implementation are yet another matter.
34 These are the authors words, not any official or legal terminology

general. The right to asylum, initially envisioned as a right for single and individual cases was and is enshrined in the German constitution. A very harsh campaign by the centre right-wing government, conservative press (tabloids and quality press) and a wave of racist attacks, riots and pogroms and murders by Germany’s well organized neo-Nazi scene put pressure on principled opponents on changes of the constitution that would have been needed for changing German asylum law. In the end, the opposition caved in and agreed. The conflict ended with the “compromise on asylum” which strongly reduced the right to individual asylum and barred refugees coming from a designated safe country of origin or travelling via a safe country of passage the right to asylum in Germany. Not only in Germany, which serves as case study here, but also everywhere in Western Europe the increased numbers of refugees called for an improvement, and also for a harmonization of the framework of asylum law (Kasparek, B., 2017b, pp. 22-27).

The Maastricht treaty allowed for the first steps for cooperation under Title IV (under the third pillar) of the TEC. The Incorporation of much of Justice and Home Affairs and Asylum matters into the first pillar since the Treaty of Amsterdam and the introduction of Article 63 (1) and 63 (2) TEC provided a basis for and a mandate to develop a common European system for dealing with flight and migration (European Asylum Support Office & International Association of Refugee Law Judges 2016, pp. 13-14).

2.6 The Tampere, the Hague, and the Stockholm Programmes, and the development of the CEAS

The European Council acted upon this mandate in the 1999 Tampere Programme. The Tampere, Hague, and Stockholm Programmes were the basic framework programmes for JHA policy through which the Common European Asylum System, abbreviated CEAS, was created. The CEAS was developed in different stages which were conceptualized in the framework programmes.

Analysing these programmes is a useful guideline for the development of the CEAS from 1999-2014. Furthermore, reading these programmes can be instructive in order to understand the broad policy intention behind more detailed secondary law. One should be aware that there are limits to what can concluded from them. They represent the policy plan of a very important actor (the European Council) in the JHA but not necessarily the consensus among all relevant policy actors. Given the fact that they are documents by the European Council, they represent the consensus of EU governments at the time of their drafting. This consensus, however, might have change over time, so does the constitution of the European Council, or a government's preference. They might also represent a hard-won minimal consensus and not reflect governments' real policy preferences. Finally, yet importantly, they are policy frameworks; broad guidelines; assemblages of political declarations of intent if seen cynical, thus it is not surprising that these plans were not always consistently realized into political reality for any number of reasons ranging from political resistance of other actors to technical difficulties. The divide between the ought of policy planning and the is of policy implementation is a consistent issue in the documents themselves, which often demand the realization of policies which were already decided upon.

Back to the CEAS. In the Tampere Programme, the European Council argues that:

"The challenge of the Amsterdam Treaty is now to ensure that freedom, which includes the right to move freely throughout the Union, can be enjoyed in conditions of security and justice accessible to all" and that *"This freedom should not, however, be regarded as the exclusive preserve of the Union's own citizens. Its very existence acts as a draw to many others world-wide who cannot enjoy the freedom Union citizens take for granted. It would be in contradiction with Europe's traditions to deny such freedom to those whose circumstances lead them justifiably to seek access to our territory. This in turn requires the Union to develop common policies on asylum and immigration, while taking into account the need for a consistent control of external borders to stop illegal immigration and to combat those who organise it and commit related in-*

ternational crimes. These common policies must be based on principles which are both clear to our own citizens and also offer guarantees to those who seek protection in or access to the European Union." (European Council 1999, section 1, paragraph A, Nr.1-3)[35] Substantively the Tampere conclusions demanded that *"This System should include, in the short term, a clear and workable determination of the State responsible for the examination of an asylum application, common standards for a fair and efficient asylum procedure, common minimum conditions of reception of asylum seekers, and the approximation of rules on the recognition and content of the refugee status. It should also be completed with measures on subsidiary forms of protection offering an appropriate status to any person in need of such protection. To that end, the Council is urged to adopt, on the basis of Commission proposals, the necessary decisions according to the timetable set in the Treaty of Amsterdam and the Vienna Action Plan. The European Council stresses the importance of consulting UNHCR and other international organizations"* (European Council 1999, section 1, paragraph, A, Nr.14).

This system called for by the European Council was quintessentially the first phase of the CEAS. The European Council demanded: *"In the longer term, Community rules should lead to a common asylum procedure and a uniform status for those who are granted asylum valid throughout the Union."* (European Council 1999, Section 1, Paragraph A. A.II, Nr. 15).

This formulation prescribed which what was to become the second phase of the CEAS, which was legally realized until 2005, and entails common minimum standards for Asylum procedures, rules defining refugee status, measures regulating cases of temporary protection in cases of mass influx and measures for improving the rules for determining the responsibility of dealing with a claim to asylum. The tools were the Asylum Procedures Directive, the Temporary Protection Directive, the Qualification Directive, The Reception Condi-

[35] N.B.: This annotation is of the authors making, not an official one in order to make this document (now only retrievable as an online document) navigable for the reader.

tions Directive and the Dublin II Regulation[36]. Also part of the package was the Eurodac Regulation (which was not initiated by the Tampere Programme but still is a core Legislation of the CEAS), which called for the creation of a biometric database of asylum seekers in order to prevent "asylum shopping" (when claimants simply go to another member state to claim asylum when their request for protection was rejected). The database, containing all 10 fingerprints of asylum claimants and irregular migrants and being fed and accessed by all Dublin convention states was implemented in 2003 but was not fully functional until 2007.The next phase came with the Hague Programme and The European Pact on Asylum which was based on it. The Hague Programme firstly called for the full implementation of the measures of the first phase of the CEAS and also calls for the implementation of the second phase of the CEAS hinting towards a lack of implementation of the existing legislation. It also called for the establishment of a European Asylum Support Office (EASO), based on cooperative preliminary work, which (the EASO) was realized in 2011 (European Council, 2005, pp. 3-4). The Stockholm Programme

[36] (7) Council Regulation (EC) No 2725/2000 of 11 December 2000 concerning the establishment of 'Eurodac' for the comparison of fingerprints for the effective application of the Dublin Convention [2000] OJ L 316/1.
Council Directive 2001/55/EC of 20 July 2001 on minimum standards for giving temporary protection in the event of a mass influx of displaced persons and on measures promoting a balance of efforts between Member States in receiving such persons and bearing the consequences thereof [2001] OJ L 212/12.
Council Regulation (EC) No 343/2003 of 18 February 2003 establishing the criteria and mechanisms for determining the Member State responsible for examining an asylum application lodged in one of the Member States by a third-country national [2003] OJ L 50/1.
Commission Regulation (EC) No 1560/2003 of 2 September 2003 laying down detailed rules for the application of Council Regulation (EC) No 343/2003 establishing the criteria and mechanisms for determining the Member State responsible for examining an asylum application lodged in one of the Member States by a third-country national [2003] OJ L 222/3.
Council Directive 2003/9/EC of 27 January 2003 laying down minimum standards for the reception of asylum seekers [2003] OJ L 31/18
Council Directive 2004/83/EC of 29 April 2004 on minimum standards for the qualification and status of third country nationals or stateless persons as refugees or as persons who otherwise need international protection and the content of the protection granted [2004] OJ L 304/12.
(Council Directive 2005/85/EC of 1 December 2005 on minimum standards on procedures in Member States for granting and withdrawing refugee status OJ L 326/13 [2005]

also dealt with the CEAS and the European Council pushed for its continued development and the implementation of the existing policies. Looking at the content of the passage it is striking that despite frequent references to the rights of migrants and the benefits of legal migration for all stakeholders, there is a certain emphasis on repressive measures fending off unwanted migration. Under the header *"Asylum: a common area of protection and solidarity"* the European Council argues that *"While CEAS should be based on high protection standards, due regard should also be given to fair and effective procedures capable of preventing abuse. It is crucial that individuals, regardless of the Member State in which their application for asylum is lodged, are offered an equivalent level of treatment as regards reception conditions, and the same level as regards procedural arrangements and status determination. The objective should be that similar cases should be treated alike and result in the same outcome"* (European Council, 2010, p. 32). One the one hand the latter passage supports migrants' rights. On the other it is calling for a harmonization of reception conditions, and thus turns towards a problem that was undermining the smooth working of the Dublin system, while also taking aim at different national policies of granting protections status and thus at de facto loopholes for migrants trying to get to Europe or to their preferred countries of destination in Europe. The theme is repeated under the headline of *"common area of protection": "There are still significant differences between national provisions and their application. In order to achieve a higher degree of harmonisation, the establishment of CEAS, should remain a key policy objective for the Union. Common rules, as well as a better and more coherent application of them, should prevent or reduce secondary movements within the Union, and increase mutual trust between Member States."* (European Council, 2010, p. 32) This passage shows a lag in policy implementation this time via-a-vis the policy goals already formulated in the Tampere Programme. They also show the longevity of policy problems, as most of these demands are still not realized.

After underlining the relevance of the Geneva convention and calling for a greater role of the EASO the council proposed a number of measure for developing and implementing the CEAS, and inter alia it stressed that *"The Dublin*

System remains a cornerstone in building the CEAS, as it clearly allocates responsibility for the examination of asylum application" (ibid, p. 32), *"to intensify the efforts to establish a common asylum procedure and a uniform status in accordance with Article 78 TFEU for those who are granted asylum or subsidiary protection by 2012 at the latest, to further harmonize the conditions of refugees (those arriving and those granted protection), to continue developing the CEAS, joint processing of asylum applications and asks the Commission to undertake a feasibility study on the Eurodac system as a supporting tool for the entire CEAS, while fully respecting data protection rules" (ibid, p. 32*) which would mean a significant extension of its functionalities. The passage then continues to call for a fairer distribution of refugees among the member states and calls for capacity building by member states concerning this regard, an issue that is well known, continues to trouble the European border Regime to this day.

The mentioned second phase of the development of the CEAS, aims towards the development of common standards beyond common minimum standards, a step that was already also explicitly referred to in the Hague Programme (European Council, 2005, pp. 3-5). With the exception of the Temporary Protection Directive, all the above-mentioned legal instruments were substituted by their revised version. The legal instruments are the Temporary Protection Directive (the first version, which is still in place), the Commission Regulation laying down detailed rules for the application of the Dublin Regulation (a piece of secondary legislation), The Qualification Directive (recast) 2011, The Eurodac Regulation (recast), the Dublin III Regulation (recast), The Reception Conditions Directive (recast) 2013, The Asylum Procedures Directive (recast).[37] Article 78 TFEU (in the Lisbon treaty) which also for the first time en-

[37] Commission Regulation (EC) No 1560/2003 of 2 September 2003 laying down detailed rules for the application of Council Regulation (EC) No 343/2003 establishing the criteria and mechanisms for determining the Member State responsible for examining an asylum application lodged in one of the Member States by a third-country national [2003] OJ L 222/3.

shrined the CEAS in primary law provided the legal basis for this. Furthermore, the fundamental rights framework in the field of flight and Asylum was considerably strengthened through the transfer of the Charter of Fundamental Rights into primary law. The mentioned establishment of the European Asylum Support Office (based on the respective Regulation) further institutionalized the European border regime. Currently, Council, Commission and Parliament are discussing another re-vamp of the Dublin regulation (Dublin IV) (however, thus far it failed due to member states resistance), as well as the Eurodac Regulation. There are plans to upgrade Asylum support Office towards the status of an agency (Dernbach, A. 2015, European Parliament 2017, pp. 111-114). In the same time span, though formally independent from the CEAS and the Tampere Programme, while being a crucial Element of the European border regime, fell the foundation of Frontex, which was established in 2004 (European Commission, 2019).

Directive 2011/95/EU of the European Parliament and of the Council of 13 December 2011 on standards for the qualification of third-country nationals or stateless persons as beneficiaries of international protection, for a uniform status for refugees or for persons eligible for subsidiary protection, and for the content of the protection granted (recast) [2011] OJ L 337/9

Regulation (EU) No 603/2013 of the European Parliament and of the Council of 26 June 2013 on the establishment of 'Eurodac' for the comparison of finger-prints for the effective application of Regulation (EU) No 604/2013 establishing the criteria and mechanisms for determining the Member State responsible for examining an application for international protection lodged in one of the Member States by a third-country national or a stateless person and on requests for the comparison with Eurodac data by Member States' law enforcement authorities and Europol for law enforcement purposes, and amending Regulation (EU) No 1077/2011 establishing a European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice (recast) [2013] OJ L 180/1

Regulation (EU) No 604/2013 of the European Parliament and of the Council of 26 June 2013 establishing the criteria and mechanisms for determining the Member State responsible for examining an application for international protection lodged in one of the Member States by a third-country national or a stateless person (recast) (Dublin III) [2013] OJ L 180/31

Directive 2013/33/EU of the European Parliament and of the Council of 26 June 2013 laying down standards for the reception of applicants for international protection [2013] OJ L 180/96

Directive 2013/32/EU of the European Parliament and of the Council of 26 June 2013 on common procedures for granting and withdrawing international protection (recast) OJ L 180/60 [2013] OJ L

2.7 The Tampere, the Hague, and the Stockholm Programmes, and non-CEAS related JHA Affairs

JHA policy in general and migration policy in particular in the framework Programmes were not limited to the CEAS and some of them are highly relevant for the topic of this thesis. Therefore, the following will summarize those aspects consider most relevant for this thesis.

One noteworthy aspect mentioned in the Tampere Programme is the demand that Europol joins the fight against human trafficking, which crucial for subject of this thesis contains also the passage in which *"The European Council calls for closer co-operation and mutual technical assistance between the Member States' border control services, such as exchange programmes and technology transfer, especially on maritime borders, and for the rapid inclusion of the applicant States in this co-operation".* (European Council 1999, section 1, paragraph A, Nr. 24) The latter passage reads in hindsight like the political foreshadowing of Eurosur (which inter alia does exactly that) as well as the currently ongoing discussions to give non-EU states access to surveillance systems and databases on border control (Monroy, M. ,2018). Furthermore, the Tampere Programme asserts that *"As a consequence of the integration of the Schengen acquis into the Union, the candidate countries must accept in full that acquis and further measures building upon it" (*European Council 1999, section 1, paragraph A, Nr. 25) which amounts to a significant extension of the Schengen system.

The composition of the body which was to draft the European Charter of Fundamental Rights, that later would become a crucial piece of primary law for the subject of surveillance in the EU, was agreed upon in the Tampere conclusions. The three other relevant aspects of the Tampere Programme, were the realization of a common area of justice, crime prevention, and a better coordinated foreign policy. In the first field, the Tampere Program included several initiatives such as the improved mutual recognition of judgments, improved

mutual extradition agreements or securing evidence across borders. In the section dedicated to reducing crime there is a focus on organized crime, drug abuse and financial crime. In the context of the border regime the strengthening of Europol is the most important aspect. The provisions on external aspects of JHA are not very precise and strengthen the link between the JHA and the CFSP (European Council 1999, Section 1, Paragraph B-D, Nr.28-62, Appendix)[38].

The Hague Programme was more comprehensive in scope than Tampere Programme and reflected the institutional maturing of the field. On the non-border related measures the Hague programme comprises the call for an extension of common mutual recognition of both, criminal and civil law acts and cooperation in that regard, the approximation and harmonization of laws, crime prevention and the call for a European drug policy. Furthermore, strengthening Eurojust, strengthening Europol and police cooperation across borders. Terrorism became its own sub-point, emphasizing the need for closer cooperation and the trustful exchange of Information among national and European security agencies.[39] The full implementation of the Directive 2004/38 also known as the Citizens Rights Directive solidifying the right of free movement for EU- citizens and their families should be mentioned in this context (European Council 2005, p. 3, pp. 7-14)

Migration policy, visa policy and border control play a significant role in the Hague Programme and stretches beyond the CEAS in the narrower sense. Its importance was emphasized right in the preamble*: "Freedom, justice, control at the external borders, internal security and the prevention of terrorism should henceforth be considered indivisible within the Union as a whole."* (European Council 2005, p.2) This is a telling sentence as it indicates a shift towards a more holistic approach towards security issues. In the meantime, it is opening up the road towards a more comprehensive and repressive approach towards security issues by bundling up border control and customs with inter-

[38] Under the old, now repealed, Pre- Lisbon Article 38 TEU.
[39] The European Union's cross-border crime persecution support and coordination Agency.

nal policing and furthermore linking it up with the fight against terrorism and its lure toward exceptional measures and states of emergency. This also could also, in the context of border protection and management, mean that measures of border management projected towards the "outside" and Third Country Nationals, could have effects on the policing of the internal population. The line between inside and outside, between necessary policing and excessive surveillance can be a fine one sometimes.

Concerning substantial policy, a general direction is given quite early in the text. Under recital 1.2, it is argued that: *"International migration will continue. A comprehensive approach, involving all stages of migration, with respect to the root causes of migration, entry and admission policies and integration and return policies is needed" and "The ongoing development of European asylum and migration policy should be based on a common analysis of migratory phenomena in all their aspects. Reinforcing the collection, provision, exchange and efficient use of up-to-date information and data on all relevant migratory developments is of key importance."* (European Council 2005, p. 3)

Given the last demands made in this recital the subsequent extension of surveillance technology, while not being an automatism, appears to a rather compelling policy development, as it is hard to imagine achieving these goals without an extension of border surveillance technologies.

It should be mentioned that the same recital also calls for the extension of the co-decision procedures to those migration-related JHA aspects except for legal migration matters, which was an important step towards better democratic accountability in the related field of policy (European Council 2005, p.3).[40]

The rather general directions indicated in the quotations above are later fleshed out under further sub-headings.

Under the sub-heading of *"Border checks and the fight against illegal migration",* the European Council argues that *"The European Council stresses the*

40 That are those migration related measures in title IV of the TEC.

importance of swift abolition of internal border controls, the further gradual establishment of the integrated management system for external borders and the strengthening of controls at and surveillance of the external borders of the Union" (European Council 2005, p.6). In this spirit the Council does not only call for the finalization of the abolishment of internal borders, but also for the implementation of the SIS II, the follow-up System of the SIS I whose realization was initially planned for the year 2007 but due to technical difficulties only took place 2013. The same sub heading demands: *"The European Council invites Member States to improve their joint analyses of migratory routes and smuggling and trafficking practices and of criminal networks active in this area, inter alia within the framework of the Border Management Agency and in close cooperation with Europol and Eurojust."* This is referring to some of the functionalities assigned to Eurosur (European Council 2005, p. 6).

The Hague Programme refers to more border surveillance technologies besides the enhancement of the SIS I to SIS II. Another sub-point *("biometrics and information systems"*), which, are quoted in full length, calls for a comprehensive extension of surveillance technology at the borders, including the use of biometrics and the interoperability of surveillance systems:

"The management of migration flows, including the fight against illegal immigration should be strengthened by establishing a continuum of security measures that effectively links visa application procedures and entry and exit procedures at external border crossings. Such measures are also of importance for the prevention and control of crime, in particular terrorism. In order to achieve this, coherent approach and harmonised solutions in the EU on biometric identifiers and data are necessary. The European Council requests the Council to examine how to maximise the effectiveness and interoperability of EU information systems in tackling illegal immigration and improving border controls as well as the management of these systems on the basis of a communication by the Commission on the interoperability between the Schengen Information System (SIS II), the Visa Information System (VIS) and EURODAC to be released in 2005, taking into account the need to strike the right balance between law enforcement purposes and safeguarding the

fundamental rights of individuals. The European Council invites the Council, the Commission and Member States to continue their efforts to integrate biometric identifiers in travel documents, visa, residence permits, EU citizens' passports and information systems without delay and to prepare for the development of minimum standards for national identity cards, taking into account ICAO standards" (European Council 2005, p. 7).

Under the heading of visa policy the importance of the (by now realized) implementation of the VIS is also stressed (ibid, p. 7). This is an interesting passage that hints at a number of measure (if not an outright programme) which extend the employment of surveillance in the European border regime and which have been realized, or are in the process of being realized right now. It mentions the control of the flow of people across borders (*"the entry and exit procedures at external borders"*) which should be *"linked up with visa application procedures"* which reads as the foreshadowing of the introduction of the entry-exit system and the (planned) interlinkage of the latter System with the VISA Information System, and in hindsight as an allusion to the (planned) ETIAS system (European Council 2005, p. 7). It also mentions the long standing project of interconnecting the different border related database (see also chapter 4), which only now is becoming more concrete by plans to make the different border-related databases not only inter-related, but also enable searches across them (CILIP.de, 2018). It also can be read as a reference to the introduction of biometric identifiers in passport. In general, it shows the centrality of biometric systems for the European border surveillance system, already back at the time of the adoption of the Hague Programme (European Council 2005, p. 7).

Another important point that became official policy through the Hague Programme was the principle of availability (of data), which signifies that data in the hands of a law enforcement body in one EU member states should be available for law enforcement in in another Member States, a principle that made critics fear that it would undermine the procedural and data protection safeguards ensured by bilateral data exchange processes. (European Council 2005, p. 7, Bunyan T., 2008, p.19).

Further aspects of migration policy that are part of the Hague Programme are integration policy, illegal employment, legal migration and deportations (European Council 2005, pp. 4-6).

The scope of the Stockholm Programme was yet even broader than in the Tampere and Hague Programme. It encompasses a broad spectrum of topics from children's rights child, to better law enforcement cooperation, harmonization of civil law, fighting terrorism, promoting fundamental rights, pushing back xenophobia and anti-Semitism, to creating the CEAS and managing borders, its sheer volume also reflects the growth and institutionalization of the field. The Tampere Programme contained about 5100 Words, the Hague Programme contained about 8000 and the Stockholm Programme about 26 000. The latter, while still being a document including a wide range of policies, also contains a number of more comprehensive strategic approaches and sub – strategies for example the internal security strategy and relates to an evolving institutional landscape with a number of agencies tasked with specific JHA-related tasks such as Frontex, Europol, INTCEN, Eurojust, or the Fundamental Rights Agency. In the following, in order not to go over the scope of this thesis the argument is limited to those aspects of the Stockholm Programme that are related to either to the European Border Regime or surveillance measures or both.

Schengen and the European Border Regime came up right in the beginning, in the preamble where their importance underlined by the European Council by stressing:

"Building on the achievements of the Tampere and Hague Programmes, significant progress has been achieved to date in this field. Internal border controls have been removed in the Schengen area and the external borders of the Union are now managed in a more coherent manner" (European Council 2010, p. 4). The same passage mentions growth of the JHA institutional landscape in particular Frontex, which was established in 2004, and the Fundamental Rights Agency, the Global Approach to Migration and Mobility (see below) gets mentioned too. So does the extension of the ordinary legislative procedure on almost all aspects of JHA, which was indeed an important

change in the institutional setup of the field (ibid, pp. 4). Under the title of *"A Europe of responsibility, solidarity and partnership in migration and asylum matters"*, the latter setting the proposed completing date for the CEAS to 2012 (European Council 2010, p. 27). It is worth mentioning the inclusion of the Charter of Fundamental Rights into the Treaty Post- Lisbon (European Council 2010, pp. 8). The issue of migration is woven throughout the Stockholm Programme, for example when dealing with Freedom of Movement for Citizens, reiterating the points about (the still incomplete) finalization of Schengen and its acquis. (ibid., pp. 8-9). A privacy-related sub-Section worth looking into is the sub-section on *"Protecting citizens' rights in the information society".* In the section it is argued: *"When it comes to assessing the individual's privacy in the area of freedom, security and justice, the right to freedom is overarching. The right to privacy and the right to the protection of personal data are set out in the Charter of Fundamental Rights. The Union must therefore respond to the challenge posed by the increasing exchange of personal data and the need to ensure the protection of privacy"* (European Council 2010, pp. 10-11), and furthermore: *"The Union must address the necessity for increased exchange of personal data whilst ensuring the utmost respect for the protection of privacy"* (European Council 2010, pp. 10-11).The segment also goes into the issue of exchanging data with third states, specifically the US. In the segment the European Council *"propose a Recommendation for the negotiation of a data protection and, where necessary, data sharing agreements for law enforcement purposes with the United States of America, building on the work carried out by the EU-US High Level Contact Group on Information Sharing and Privacy and Personal Data Protection"* as well as *"consider core elements for data protection agreements with third countries for law enforcement purposes, which may include, where necessary, privately held data, based on a high level of data protection"*; and furthermore calls for a comprehensive data protection strategy including privacy enhancing technologies (European Council 2010, pp. 10-11).This segment hints at the almost necessarily contradictory nature of EU policies on surveillance, concerning the exchange of data, regulation of the internet, border control and privacy, as some of these policy goals conflict with each other. The above mentioned pol-

icies in favour of privacy conflict with the policies in favour of surveillance which are formulated elsewhere in the document, such as the interoperability of databases, the introduction of new databases or the principle of availability (European Council 2010, pp. 18-19). It also an indicator of political disputes such as the conflict over encryption, the Data Protection Regulation or the systems that are the subject of this thesis that came up much later.

Another policy initiative connected to the Stockholm Programme worth mentioning is the Internal Security Strategy. Besides the almost customary references to solidarity among member states and the demand for a *"cross-cutting approach"* and the rule of law it also referred to an *"intelligence-led approach"* in criminal law (European Council 2010, p. 18) which might be somewhat difficult to reconcile with the need to protect privacy and civil liberties, and the setting up of the internal security fund (ibid, p.18). The same theme is repeated with regards to the Information Management Strategy for EU internal security which, while not under the heading of migration is still relevant in a thesis dealing with issues of surveillance and privacy. It calls for a *"business-driven development (a development of information exchange and its tools that is driven by law enforcement needs..., a strong data protection regime consistent with the strategy for protection of personal data […] and […] a well targeted data collection, both to protect fundamental rights of citizens and to avoid an information overflow for the competent authorities"* (ibid., p. 19). This is a collection of policy goals that are likely to collide with each other. The European Council also calls for the establishment of an EU large scale IT Infrastructure Agency[41]. On the wish list are furthermore the implementation of PNR –Data retention.[42] the Implementation of ECRIS and EPRIS (two different European Police and criminal records data -bases), a EU- PNR database, interoperability of EU -systems in accordance with the internal security strategy and the establishment of a database of so-called travel-

[41] This demand is by now realized through the creation of EU-Lisa
[42] The retention of PNR Data is realized by now (see also chapter 4)

ling violent offenders (ibid, pp. 18-19)[43]. The latter is a project that has not been realized but reappears with great regularity. As chapter 4 will show most of these projects are realized by now. Visa policy also gets a separate section in the Stockholm Programme (European Council 2010, p.27)

In this part the focus lies on the Tampere, Hague, and Stockholm Programmes as they were the framework programmes fixating the broad policy outline of the field. These overviews over the non-CEAS related and the CEAS-related aspects in them shows the long-term development of the European JHA and asylum policy. They also show the role surveillance technology plays in it and thus helps to understand the question what kind of border regime is emerging by the birth of European border regime.

The long-term character of these policies is worth mentioning and will be elaborated in the following. The CEAS is still under construction but its roots go back to the late 1990s. The same goes for the development of the digital border regime. The outline of an interconnected system of databases with the biometric databases at its core, can be traced until the Hague Programme, the spelling out of some details for example concerning the function of the VIS or Eurosur can be found in Stockholm Programme. Crucial concepts for the process of building a huge, interconnected, primarily data-based border surveillance meta-system, such as interoperability of systems and data availability were also formulated in the Hague and Stockholm Programmes. The main point that shall be demonstrated here is that the extension of border surveillance technology is a long-term policy project supported by the majority of EU Member State governments. In the framework and internal logic of the policy programmes such a development is compelling. It is the European Union’s declared goal is to manage borders and effectively stop illegal immigration, steer economically motivated migration and manage legal migration. Therefore, controlling the borders requires an effective control of whom is entering a given territory. Thus, the creation of a number of border databases

[43] Read: potentially violent fans and protestors and those considered as such. The travelling violent offenders data-base is still not realized.

controlling different categories of people crossing and approaching the borders, as well as other surveillance technologies seems sensible from a practical perspective. To make these systems interoperable and granting different law enforcement agencies from various member states and other national and European agencies also appears reasonable from the perspective of those using such systems. The downside is the creation of massive systems of mandatory data retention, with a staggering huge number of entry points, massive numbers of personnel having access to this data on its way to becoming a meta-system suffering the same issues.

The technological securitisation of the border is just one of several strategies of discouraging migrants employed by the European Union. In the next two sections, the strategies of Integrated Border management and of externalization will be elaborated upon.

2.8 Integrated border management

In this sub-section describes the concept and strategy of integrated border management, the role it plays in the creation of the European border regime and the role that surveillance technologies play in the concept of integrated border management.

The concept of integrated border management is the EU's attempt to converge its different tactics devised to control its borders and prevent the unwanted entry of people (in particular irregular migrants) and goods, ensure customs and epidemic control, regulate visa and the desired and steered entry of migrants, tourists and other travellers as well as other aspects of border management into one coherent strategy. As such it entails the cooperation and coordination of all the different agencies entrusted with protecting the borders as well the interconnection of the different policies designed towards that goal. It is an ambitious concept uniting policy aiming on long term developments as well as bureaucratic tasks. It is a strategic link between larger scale policy design and their everyday implementation. Integrated Border Management aims at and is

part of an overall strategy of Europeanization of the border control, in which the foundation of Frontex was a crucial starting point (Kasparek 2017b, p. 49). It also links up with the strategy of externalization

The roots of the concept go back to the early 2000s and were first mentioned in a 2002-06 planning document for the Western Balkans. It was then further developed officially endorsed by the European Union[44] [45] and it even its way into the Lisbon Treaty.[46] (European Commission 2010, p. 123). Integrated Border Management is defined as consisting of the following elements:

"Border control (checks and surveillance) as defined in the Schengen Borders Code, including relevant risk analysis and crime intelligence; Detection and investigation of cross-border crime in coordination with all competent law enforcement authorities; Coordination and coherence of the Inter-agency cooperation for border management (border guards, customs, police, national security and other relevant authorities) and international cooperation; and the four-tier access control model (measures in third countries, cooperation with neighbouring countries, border control, control measures within the area of free movement, including return)." (European Commission 2010, p. 20)

The four tier access model in turn consists of the so called first tier measures aiming at third countries of origin or transit such as for example advice for the visa processes, the second tier aims at the close cooperation with neighbouring countries, which includes for *"handling incidents in an objective manner"* and the exchange of information. The third tier are measures at the border itself while the fourth tier relates to measures inside the Schengen area (European Commission, 2010, pp. 20-21). Other aspects of Integrated Border Manage-

[44] The International Centre of Migration Policy Development an international organization which researches Migration and develops related policy had a crucial role in developing the concept.

[45] One of the first policy documents fleshing out the Concept was a 2002 Commission Communication (COM (2002) 233 final) which also was one of the first policy papers mentioning the concept of a European border guard. It can still be found here: http://www.statewatch.org/semdoc/assets/files/commission/COM-2002-233.pdf

[46] Article 77 1(c) and Article 77 2 (d) TFEU

ment are inter-service cooperation (between departments in one ministry), inter-agency cooperation (between ministries) and international cooperation. In terms of agencies it covers all agencies from border guards and customs to those responsible for phytosanitary[47] requirements, and in terms of policy areas it includes visa policy, asylum policy the fight against corruption and information management (European Commission 2010, pp. 23-105). Information management is also an aspect relevant to the subject of this thesis, and for this reason it will be further explored in the next section. The handbook on IBM by the European Union used as a source here does emphasize the variability of sources of information that need to be combined in order to fulfil the tasks of border management:

“The primary goal of information gathering is to systematically collect data for the purpose of making informed decisions. Information is needed for monitoring the operations of border management agencies, exchanging statistical data or information on arriving goods with other border management agencies and for risk analysis and/or early warning. This can be also explained as follows: Border management requires information to be collected on a wide range of activities. This information will come from various sources and will be received in different ways. As a result, information collected for one purpose may need to be related to information collected elsewhere for a different purpose. An example would be that information from the investigation of a forged passport can later assist in building a risk profile. This requires consistent processes to be in place at all levels of activity in order to manage information as a corporate resource for border management agencies as a whole.” (European Commission 2010, pp. 90)

This short passage illustrates how very practical needs lead to an approach towards data (and thus surveillance) which might be very sensible from the perspective of border authorities, but is also very encompassing and problematic from a data protection perspective (ring fencing is basic principle of data protection). The passage continues to stress the importance of combining different

[47] Concerning the health of plants.

sources of information and forms of data in order to get a complete picture of a given situation (an approach that goes well together with the strategy of combining different databases that will be discussed in chapter 4 or the multi-platform approach of Eurosur) : "*This management of information involves the task of linking together information from a wide range of sources from open sources and publicly available information to that obtained covertly by law enforcement agencies –in order to build up a composite picture. This will help to highlight links between people, objects, locations and events that are essential in supporting the overall analysis of border-related threats. Identifying these links enables decisions to be made about priorities and the resources needed to manage those highest risk issues."* (ibid, p. 90)

Risk Analysis and Management is an integral part of data management in IBM. Risk and threats are analysed on different levels (strategic, tactical and operational) and factors, referring to different levels of analysis, planning and implementation. Roughly summarized the first deals more with the political risks and boundary conditions related (politics, geography, law, economics etc.) risks, the second, with the managerial level (logistics, planning, training) while the third addresses the day to-day management of risks by street level bureaucrats. Threats and risks are defined by the EU in the context of IBM as: *"A threat is anything that leads to a violation or disruption of the border control regime or has a potential negative impact either directly or indirectly. The risk is the likelihood or probability of that threat being realised."* (European Commission 2010, p. 91). They are categorized into these analytical levels and then assessed, analysed and profiled in order to anticipate risks and steer resources. The probabilistic nature of the exercise of risk assessment and threat analysis has a similar logic to many algorithmic big data systems, and thus is likely an area of application for this kind of technologies. It should be mentioned that IBM data management strategies also include a data protection rules and strategies to that regard (European Commission 2010, pp. 95-97). IBM also requires the establishment of a Joint Risk Analysis Unit (ibid, p. 94-95).

The Stockholm Programme contains a passage on integrated border management as well. It is the one passage that makes reference to Eurosur and the Entry7Exit System. After reiterating the need to make legal migration possible while stopping illegal migration and cross-border crime, the European Council calls for a better coordination between EASO and Frontex and in several points argues for strengthening the mandate of Frontex, including that the European Council *"invites the Commission to initiate a debate on the long-term development of Frontex. This debate should include, as was envisaged in the Hague programme, the feasibility of the creation of a European system of border guards"* (European Council 2010, p. 26) this in turn calls for the transformation of Frontex from a coordinating and intelligence providing agency to a border guard / European border police force, a development which faced a significant resistance from member states and was formally implemented in 2016 (Frontex 2019 a, Mrozek, A. 2017, pp. 84-96). Eurosur is mentioned explicitly in the programme:

"The European Council looks forward to the continued phased development of the European Border Surveillance System (Eurosur) in the Southern and Eastern borders, with a view to putting in place a system using modern technologies and supporting Member States, promoting interoperability and uniform border surveillance standards and to ensuring that the necessary cooperation is established between the Member States and with Frontex to share necessary surveillance data without delay" (European Council 2010, p. 26).

On the issue of automated border control (the technology behind the not realized registered travellers program) the section continues:

"The European Council takes note of the ongoing studies of Member States and Frontex in the field of automated border control and encourages them to continue their work in order to establish best practice with a view to improving border controls at the external borders."

The European Council furthermore argues:

"The European Council also invites Member States and the Commission to explore how the different types of checks carried out at the external border

can be better coordinated, integrated and rationalized with a view to the twin objective of facilitating access and improving security. Moreover, the potential of enhanced information exchange and closer cooperation between border guard authorities and other law enforcement authorities working inside the territory should be explored, in order to increase efficiency for all the parties involved and fight cross-border crime more effectively.

The European Council considers that technology can play a key role in improving and reinforcing the system of external border controls. The entry into operation of the second generation Schengen Information System II (SIS II) and the roll-out of the Visa Information system (VIS) therefore remains a key objective and the European Council calls on the Commission and Member States to ensure that they now become fully operational in keeping with the timetables to be established for that purpose. Before creating new systems, an evaluation of these and other existing systems should be made and the difficulties encountered when they were set up should be taken into account. The setting up of an administration for large-scale IT systems could play a central role in the possible development of IT systems in the future.

The European Council is of the opinion that an electronic system for recording entry to and exit from Member States could complement the existing systems, in order to allow Member States to share data effectively while guaranteeing data protection rules. The introduction of the system at land borders deserves special attention and the implications to infrastructure and border lines should be analysed before implementation.

The possibilities of new and interoperable technologies hold great potential for rendering border management more efficient as well as more secure but should not lead to discrimination or unequal treatment of passengers. This includes, inter alia, the use of gates for automated border control.

The European Council invites the Commission to:

— present proposals for an entry-exit system alongside a fast track registered traveller programme with a view to such a system becoming operational as soon as possible,

— to prepare a study on the possibility and usefulness of developing a European system of travel authorization and, where appropriate, to make the necessary proposals,

— to continue to examine the issue of automated border controls and other issues connected to rendering border management more efficient." (European Council 2010, pp. 26-27).

This passage was quoted at length because it shows the agenda of creating an interconnected database regime. It also shows the role that the concept of integrated border management is assigned in the creation of the border regime. IBM is an informational nodal point, tying not only technology and information together but also the different actors of the border regime.

The segment on visa policy in the Stockholm Programme mixes foreign policy (which countries get freedom from visa requirements) and migration policy and the increased use of technology at borders via the roll out of the VIS[48]. Of particular interest is the following passage: *"The European Council, with a view to creating the possibility of moving to a new stage in the development of the common visa policy, while taking account of Member States competences in this area, invites the Commission to present a study on the possibility of establishing a common European issuing mechanism for short term visas. The study could also examine to what degree an assessment of individual risk could supplement the presumption of risk associated with the applicant's nationality"* (European Council 2010, p. 27). Here again there is a link to the risk assessment /scoring/dragnet investigation logic that is also part of many border surveillance technologies that either exist, are planned or were planned as part of the European border surveillance regime. This applies in in particular to the PNR-Database, the ETIAS system, or the failed Registered Travellers Programme.

IBM and the role and the surveillance technology plays in it are indicative for a number of shifts in the way borders are perceived. It is a shift away from

48 Which is finished by now.

perceiving borders as solid lines that are being crossed, towards considering them as spaces *borderlands*. *Borderlands* are a continuum that extends beyond the border or frontier outside, the space that is enclosed by the border and which continues inside it (Hess, S., Heimeshoff, L. M., Kron, S. et al., pp. 14-15). This process did arguably already start by creating the Schengen Area and the concurring concerns on security, which lead to the creation of the SIS and, at least partially, an actual intensification of the surveillance of the internal border crossings (Baumann, M., 2014) as well as a shift away from the then abolished internal border checks to other methods of surveillance (such as the usage of the SIS or police patrols nearby internal member state borders). The border, while abolished for people travelling inside the Schengen Area, especially Union citizens gets in this way actually extended for others, into the internal space of the Schengen area. The same can be said for locations related to the CEAS such as hotspots or refugee camps, which can also be theorized as a part of the border regime inside the territory of the European Union. The ongoing influx of migrants, the often-changing nature of populations forced to flee or willing to migrate, as well as a series of events lead to a change of approach in which the EU (and other actors) increasingly try to stop migrants before they reach the border. The goal became to keep them in their countries of origin or transit by externalizing the border trough cooperating with these countries, while in meantime opening up (very limited) legal avenues for some, considered desirable, migrants and addressing the root causes of migration. In other words, trying to prevent, halt and manage (irregular) migration before and while it happens, not just when people arrive at the borders of Europe, a process that will be described in greater detail in the next section. Through this strategy political processes that do not take place at the borders itself still become an integral aspect of the “management of the border”. They become part of the process of creating the border. The border is projected beyond the actual border itself. The border becomes a “border zone” (Squire, V., 2014, p.164) in which the attempt of the border creating institutions aims rather to steer the movement of migrants rather than controlling lines and preventing migrants from crossing lines, that define the border (Casas-Cortes, M. , Cobarrubias, S., Heller, C., Pezzani, L. , 2014, p. 308).While the process to

create this space was a political one, IBM attempt to extend control over this space "beyond, at and behind the border" and integrate the actors and tools needed to do so (ibid, p.303). While at the beginning stood the establishment of a zone free of internal border checks, the result is not only a strong integration and thus strengthening of different actors concerned with border control across sectors and countries. It also leads to an actual increase of the space that is controlled on both side of the border. This is mirrored in the database regime and the used surveillance technology. A person entering the EU is registered, monitored and checked against databases and assessed as a risk before she enters the EU (via the VIS and eventually via ETIAS, PNR Databases). When she enters the EU (SIS II, PNR Databases, eventually the Entry/Exit System). When she has entered the EU, she might be still monitored regarding the length of her stay and if she has left in due time (via the EES). If she is a refugee, she is checked and registered once she enters the CEAS as an Asylum seeker (SIS II, Eurodac, national asylum seekers databases) until she gets a different permanent legal status or gets deported. In any case the database system tries to span the whole border space and the people moving inside it which are being dealt with by the border regime. As much of it lies either beyond the Control of the Union and much of what is happening (irregular migration) in that border space is "off the map" (and often quite deliberately so), the extension of the logic of risk to the people moving inside the border space is sensible from the point of view of the border regime. Managing the unknown factors with limited resources is by its very nature a task that is susceptible for the usage of surveillance technology as well as probabilistic approaches.

2.9 Pushing the borders outwards – the strategy of externalization

In this part of the chapter the EU strategy of trying to prevent the entry of refugees will be presented, which encompasses the cooperation with transit countries and countries of origin in order to prevent refugees from leaving or cross-

ing these countries, thus effectively enforcing EU border policy way beyond, or rather ahead the actual EU- borders, as well as the role surveillance technology plays in this policies and processes.

Externalisation was quite early in its development a part of the policy menu of the European border regime. It was a strategy that used the whole arsenal of policy tools from research, the European Neighbourhood Policy, to classical foreign policy, to development policy to creating new police units and exporting surveillance technologies to third countries.[49] The diverse policies of externalization should not be seen in isolation with other aspect of the border regime. The different elements of the border regime, such as the extension of technological surveillance, policies on asylum, then Schengen and the Dublin System or visa policy are interlinked and are considered as such from a policy perspective. There are countless initiatives and agreements with countries of origin and countries of transit with varying degrees of success and this section does not claim to be their complete chronicle. The strategy to externalize the border is a long-term strategy and is since long a staple of the European policy arsenal. It got an increased salience in moments in the history of the border regime which showed the limits of those policy approaches focusing on the fortification of the border (Kasparek 2017 b, p.61-70).

It is difficult to put a precise start date to the process of externalization. One earlier process was the so-called Budapest Process an informal forum of intergovernmental cooperation with the aim of managing migration. The latter notion was developed in the political environment of the IOM and implies that migration should be steered to the economic benefit of all concerned parties, although arguably in practice only the aim of controlling irregular migration survived in the long term (Kasparek 2017b, p.65-67).The Budapest Process, still exists and now also includes such countries as China, Russia, Iraq and Afghanistan and had the aim at integrating Central and Eastern European EU

[49] Or rather strongly suggesting that these units be created, or guaranteeing via bilateral or multilateral agreements that this happens. The sovereignty of partner countries was of course never touched.

membership candidate – countries. The goal was to prepare them for their future role as Schengen border countries. In the case of other non-candidate countries, for example in the case of the Ukraine, it should prepare them for their role as advanced outpost of EU border control (Kasparek 2017b, pp. 70-74, ICMPD, 2018). Managing migration and dealing with its causes were also an important aspect of the Barcelona process, an intergovernmental cooperation format for the EU and the Arabic Mediterranean countries (Kasparek 2017b., p.70).[50] Similar formats, often facilitated by the ICPMD, have since multiplied, and now encompass a large number of countries of transit and origin, and or of strategic importance.[51] These fora and the policies such as the Valetta Action plan, are multifaceted. [52] They include a host of actors (the EU, regional powers, countries of origin and transit, international organizations, civil society) and a multiplicity of strategies some of them focus on preventing migration by hindering the movement of migrants, some of them focus on improving the conditions in the countries of origin. There are also other frameworks in which the strategy is pursued. One framework where it is employed is the European Neighbourhood Policy another are agreements concluded as part of EU –Accession Negotiation[53]. One also should not underestimate the importance of national governments and bilateral relations in the politics of migration. The cooperation of Italy and Libya, both with the Gadhafi-regime and its succeeding competing de-facto regimes has been crucial for shutting down the route via Libya and the Mediterranean (Heller, C., Pezzani, L., 2017,

50 Which was in 2008 revived as the, much more ambitious, Union for the Mediterranean.

51 Worth mentioning are the Prague Process (Central and Eastern Europe, Northern Europe and the Balkans), The MTM Dialogue (including the EU and African and Arab Countries and host of International agencies and Organisations)., The Rabat Process (58 countries from Europe and Africa), the Khartoum Process (Countries along the Route from the Horn of Africa to Europe) or the EUROMED migration IV Process (EU and Mediterranean) countries. (ICMPD, 2018)

52 https://www.rabat-process.org/images/RabatProcess/Documents/valletta-action-plan-2015-monitoring-rabat-process.pdf

53 One example would have been the attempt to conclude a substantive readmission agreement with Turkey and to create large refugee camps in in Turkey at the borders with Iran, Iraq an Jordan financed by the EU. The plan was pursued in 2003 during a round of EU-Turkey accession (pre)- Negotiations. It also shows the longevity of certain policy proposals. (Kasparek 2017 b, p.70-71

p. 215). The European border regime is still a multi-level governance system.[54]

In terms of substantial policy, externalization includes a host of policies and projects. Some policies aim at controlling borders and containing the autonomous movement of migrants. This includes the exportation of surveillance technology and methods such as the introduction of biometric passport or granting interconnecting with European databases or granting European authorities access to national databases (Kasparek 2017b, p. 71, Monroy, M., 2018, Schwarz, N.V. 2017, p.65). Readmission agreements and easing deportation are another crucial aspect of many agreements. Other projects aim to boost development and facilitate legal migration, although their effect is disputed (Dünnwald, S., 2014, pp. 58-74).

The basic principle of creating a de -facto buffer zone absorbing the migration towards Europe was already formulated in a 1998 policy paper by the Austrian Council Presidency.

"[M]odel of concentric circles of migration policy could replace that of 'fortress Europe' [...] the Schengen states currently lay down the most intensive control measures. Their neighbours should gradually be linked into a similar system particularly with regard to visa control and readmission policies. A third circle of states (CIS area, Turkey, and North Africa) will then concentrate primarily on transit checks and combating facilitator networks, and a fourth circle (Middle East, China, black Africa) on eliminating push factors" (Hayes, B., Vermeulen, M.. 2012, p. 14).

Policies of externalization along that line were continuously extended throughout the years. They gained significant traction in 2005, when the shock of the mass-storming of the Border fences in the Spanish exclaves of Ceuta and Melilla triggered a change of policy approach, away from focusing on the

[54] The decisions to declare states to be safe third countries for deportations, which is a very crucial element to make the externalization strategy work is still in the domain of the member states.

fortification of the borders towards a steering of migration. This change of approach was crucial for the initiation of Integrated Border Management, as well for the Global Approach to Migration and Mobility (GAMM) which in turn was an influential policy framework for externalization policies (Kasparek 2017 b, p.60-70).

In this policy strategy the European Union attempts to manage migration by intermixing external policy, migration policy which is turn connected to internal policy and more importantly to mould cooperation with a very wide and diverse range of partners and through a diverse set of instruments into a coherent strategy. The dialogue with countries of origin and transit as well as direct EU -Neighbouring countries but also with other Partners through such intergovernmental fora as the already mentioned Budapest or the Prague process are important aspect. More detailed bilateral agreements such as Mobility Partnerships and Common Agendas for Mobility and Migration and Mobility then deal with concrete measures concerning visa policy or readmissions (DG Home Affairs 2018). The GAMM has since then featured in countless policy documents.

The tendency to externalize borders found also expression in the Tampere Conclusion, which looked forward for a *"Partnership with the countries of origin"* (European Council 1999, Section A. A. I) and argued that *"The European Union needs a comprehensive approach to migration addressing political, human rights and development issues in countries and regions of origin and transit"*. The call for cooperation with the countries of origin was repeated under the header of the *"Management of Migration flows"* (European Council 1999, ibid., Section A. A, IV).

The Hague Programme argued under the heading of partnership with third countries that:

"Asylum and migration are by their very nature international issues. EU policy should aim at assisting third countries, in full partnership, using existing Community funds where appropriate, in their efforts to improve their capacity for migration management and refugee protection, prevent and combat illegal

immigration, inform on legal channels for migration, refugee situations by providing better access to durable solutions, build border-control capacity, enhance document security and tackle the problem of return" and further under the Heading of cooperation with countries of transit "[…] *As regards countries of transit, the European Council emphasizes the need for intensified cooperation and capacity building, both on the southern and the eastern borders of the EU, to enable these countries better to manage migration and adequate protection for refugees. Support for capacity building in national asylum systems, border control and wider cooperation on migration issues will be provided to those countries that demonstrate a genuine commitment to fulfil their obligations under the Geneva Convention on Refugees*" (European Council 2005, p. 5).

The GAMM was explicitly mentioned in the Stockholm Programme as well (European Council 2010, p.28). The same policy document argues for the application to externalize border controls through a number of other suggested measures from "capacity building" in countries of transit and origin, cooperation with international agencies (namely the UNCHR) or strategies of poverty reduction in countries of origin (European Council 2010, pp. 33). The externalization of the border also includes those aspects of the Stockholm Programme that deal with the foreign policy of the EU, referred as to as the External Dimension of JHA. The aforementioned programmes and foreign policy agendas as well the European Neighbourhood policy is alluded to as well. One interesting aspect of this passage is how, policing, border policy, external security and foreign policy are intermingled. Very different aspects of security from addressing illegal migration, again from addressing the causes of flight, to cooperating with countries of transit to securing the borders, to dealing with the drug trade are treated together (European Council 2010, pp. 33-37-82). Besides the fact that the EU's factual possibility of influencing the situation on the ground varies greatly which can be seen in the example of Iraq as compared to the West Balkans which both get explicitly mentioned in the concerning passage. It can also be questioned in how far mixing up such varying issues and methods of achieving security may not bring along inappropriate spill overs from one area of security into another. Policy areas where this might be

problematic are militarising border security or securitising development policy.

While the impact of any given policy paper and broad strategies such as those formulated in the Hague and Stockholm Programme and the GAMM are notoriously difficult to assess, and might legitimately be contested, it is hard to underestimate the importance of the Strategy of Externalization for the practical functionality of the border regime. Externalisation was a crucial, if not the most crucial element in the border regime up to the Arab spring.

The fact that before the Arab Spring the authoritarian regimes served as defacto gatekeepers of the Mediterranean, was one of the crucial factors that limited the numbers of migrants and prevented the collapse of the border regime (Heller, C., Pezzani, L. 2017, p.215). These authoritarian regimes did not only serve as a barrier to prevent their own populations to leave, but also as an obstacle to those migrants transiting their countries on their way to Europe. They also were the countries taking in the largest number of refugees from the Syrian Carnage and they still do so today. When their grip was loosened and these regimes failed, faltered or went into crises in the aftermath of the Arab spring, and further turmoil engulfed the region and caused. massive flight movements, the externalization strategy and the regional containment strategy it quintessentially included collapsed. With it, significant parts of the European border regime partially temporarily collapsed as well in 2015 (Hess, S., Kasparek, B., Kron, S. et.al., 2017, p.9).

2.10 The 2015 refugee crisis

In the following pages the 2015 refugee crisis, will be explained which is widely considered a critical point in the development of the European border regime that showed the structural problems of the European border regime. These structural issues of the European border regime and the underlying policy dilemma and the policies that aim to fix the European border regime, will be described.

The harshest test for the European border regime was the refugee crisis in 2015, which led to its partial collapse and the ongoing limited (in time and scale) re-introduction of border controls in the Schengen area (Hess, S., Kasparek, B., Kron, S. et al. 2017, pp. 6-15, Kasparek, B., 2017b, pp. 102-104). The crisis was a crisis of the European border regime in dealing with this mass influx of people according to its self-set policy goals.

Arguably the refugee crisis is a permanent one. Irregular migration into the EU has been going on since the foundation of the European border regime and migratory pressure has been relatively high and constant for at least 20 years now, so has the worry of policy-makers and significant sectors of the electorate about problem and impacts- real, potential and perceived. And one might add the fear of policy-makers of the backlash at the polls as a reaction to ongoing irregular migration by their electorate. Policy-makers are faced with a wicked policy conundrum. One the one hand migration is economically necessary for many economic sectors in many member states of the European Union, and many sectors relied on cheap labour from, often without a legal residence and thus easily exploitable and then strategically legalized, migrants, a pattern that was particularly prevalent in southern European Union member states before the onset of the economic and debt crisis (Heller, C., Pezzani, L. 2017, pp. 216-217, Kasparek, B., 2017, p.41-43). Migration is also necessary for demographic reasons (Bricker, D., Ibbitson, J,.2019, pp. 55-73). At the same time is migration and the integration of refugees as costly and laborious as it is necessary, deeply unpopular with significant sectors of the European populace, and some European governments. One the one hand there is a moral, humanitarian and legal obligation to help people in distress. In the meantime, unbridled irregular migration might create problems that might not be manageable any more. Open borders, however, might in any case create a massive political backlash in parts of the European populace, looking at the reactions sparked already by the short time, partial break with the European border regime in 2015, as can be illustrated by the upsurge in right-wing extremism and xenophobia in Germany (Schwiertz, H., Ratfisch, P. 2017, pp. 151-162).

And there is very little to suggest that the problem of illegal immigration will abide any time soon. A little thought experiment might underscore this point. It is widely proposed that the best solution to the problem might be to resolve the causes of flight inside the refugees' countries of origin. However, even in a best-case scenario in which all the multiple crises causing people to flee to Europe could be solved, irregular migration to Europe would continue. It would take now-war torn countries as Syria decades to rebuild. It would also take developing and emerging economies also decades to catch up with the economic level in the European Union. Until this happens there would be still ample motivation for people to seek refuge in Europe, be it poverty or the simple desire to improve one's life. Furthermore, there are structural factors that would even in the best-case scenarios serve as push and pull –factors towards irregular migration, from economies in the countries of origins profiting more from migrant remittances than losing from the brain drain, to the already mentioned demand for cheap labour in some sectors of the European economy. While some of these issues could be resolved by developing better pathways for migration, some amount of illegal migration would probably persist. However, this relatively optimistic scenario is far from likely to happen. In the opposite, ongoing crises and probable future crises for example flight movements caused by catastrophic climate change, will likely result in migratory pressure and the number of people seeking refuge in the EU will probably stay high or may even massively increase. Catastrophic climate change might contribute to an increase in refugee numbers, although it is not well known how much climate changed induced migration will affect industrialized countries and the estimates of the number of potential future climate refugees vary drastically (IOM 2014 , pp. 37-40) [55].

In the meantime, the death toll at the European border regime has been high all along whether in Mediterranean, in the Sahara or elsewhere. Numbers are notoriously difficult to obtain, and for a long time there were no official ag-

[55] According to the IOM the estimates of potential climate refugees worldwide (of which the vast majority will flee in their respective global region) until 2050 vary from 25 Million to 1 billion (IOM 2014, p.38)

gregate numbers available. The obtainable numbers are mostly from activist and journalist observers who counted around 30.000 fatalities in the time frame from 2000 to 2016, with obvious issues concerning methodology and margin of error, as most governments do not keep track of the number of fatalities attributable to their border regimes. Estimates are very conservative as many incidents will not be reported. Some observers even argue that these estimates only represent one third of all migrant perished during their journey (Brian, T., Laczko, F., p. 15)[56] Furthermore, it is not easy to attribute deaths to policy and different actors have different methodologies for counting. [57] Only since 2014 there is a global official statistics on missing and deceased meaning deceased en route to their destination, provided by the IOM. The problem is exacerbated by the fact that these numbers build upon each other.[58] They illustrate that the policy dilemma described above is a substantial one. Attempting to seal off the borders of Europe to people trying to enter them without permission is literally a matter of life and death. Keeping the balance between limiting the influx, maintaining human rights, and having an eye on their own national interest drove the ongoing conflicts about the design of the CEAS ever since, and stood in the way of designing a system that would have been

[56] The “Fortress Europe Blog” by the Italian Journalist Gabriele de Grande counts 27.382 fatalities since 1988. https://fortresseurope.blogspot.de/2006/02/immigrants-dead-at-frontiers-of-europe_16.html.
The anti-racist NGO Network ‘united against racism’ produces its own list of fatalities, starting 1993 accounting for 33.305 Dead in June 2017. The list can be found under this link: http://www.unitedagainstracism.org/wp-content/uploads/2019/07/ListofDeathsActual.pdf
The Investigative Journalist project the Migrant files counts more than 30.000 Dead in the time frame from 2000 to 2016 you can find the data here: https://docs.google.com/spreadsheets/d/1YNqIzyQfEn4i_be2GGWESnG2Q80E_fLASffsXdCOftI/edit#gid=1085726718

[57] The Fortress Europe blog and United against Racism, for example, explicitly count death in custody pending deportation, including suicide, while the IOM explicitly does not.

[58] The IOM numbers used for the first „Missing Migrants „ Report 2014 build and expand upon on the numbers of the Fortress Europe Blog and the Migrant File who (The Migrant Files) in turn build upon and expand upon the death count from United Against Racism and the Fortress Europe Blog (The Migrant Files 2016,, Brian, T., & Laczko, F 2014 pp.92-97).These sources in turn rely on media sources. Another source for statistics is the Spanish NGO APDHA (Asociación Pro Derechos Humanos de Andalucía /Andalusian Association for Human Rights)

more capable of dealing with the sudden increase of people seeking protection. The initial version of the Dublin system designed in the early nineties was already deficient in dealing with mass influx of people, and although the version applicable in 2015 was created as a reaction to that, the system, already seriously undermined by a number of factors that will explained below, broke down under the unprecedented number of arrivals and the refusal of several actors to keep in their assigned roles and play by the rules (Hess, S., Kasparek, B., Kron, S. et al. 2017, pp. 6-15, Kasparek 2017b, pp. 38-51).

However, some causes of the later crisis have their roots way earlier then 2015. The border regime and in particular the Dublin system were riddled with problems right from the beginning such as an unequal distribution of refugees. While these problems were known from the beginning, they deepened with the onset of the economic crisis 2008, exacerbated from 2010 onwards until they culminated in 2015.

The rule, that the state in which an asylum applicant arrives is also the one that has to process the application and host the refugee, leads to a massive imbalance towards the countries situated at the borders, which besides bearing the brunt of the costs of borders policing also had to take in the vast majority of refugees. This particularly affected and continues to affect Italy, Greece Malta and Cyprus. This bears the question why the border states agreed to this arrangement in the first place. In case of the central and Eastern States, the Schengen A*cquis* and the Dublin rules were part of the A*cquis Communautaire* and the rules and conditions they had to accept, as a part of the political due they had to pay in order to join the Union. Meanwhile the scenario that unfolded in 2015 was indeed not predictable in the scale, speed and intensity back then. In the case of the southern states the socio-economic situation before 2008 was radically different and even called for a certain degree of immigration during the boom. During this phase the southern European States often systematically and collectively legalized those groups of migrants needed for their economy while still harshly policing others as well as the borders. The 2008 European pact on Migration and Asylum made the latter practice illegal, thus effectively enforcing a more northern European model of migration man-

agement on the southern border economies (Kasparek, B., Tsianos, V. S. 2014, pp. 42-46, Lafazani, O., Maniatis, G. 2014, pp. 112-116). In the meantime, the southern border states relative openness towards migration changed due to the massive economic crises from 2008 onwards. After that being a border state of the Schengen /Dublin Regime became a heavy liability and increasingly public opinion turned, as well as official politics, against irregular migration.(Lafazani, O., Maniatis, G. 2014., pp. 116-122)[59] Those states that had to deal with the imminent influx critiqued the status quo right from the beginning. There are discussion on reforms aimed at a more equal distribution of the burden, which, however, effectively still has not happened.[60]. Especially after the outbreak of the general economic crisis and the spiralling debt crisis which severely curtailed the capability of the most affected states (Italy and in particular Greece) to deal with the influx of irregular migrants, authorities in these countries started to practically undermine the Dublin system through lax registration practices and handing out humanitarian visas that allowed migrants to continue their travel further north, but did not give them residence titles (Kasparek 2017b, pp. 41-48).

The next fault-lines in the European border regime were of a legal nature as a number of court cases undermined both the strategy of externalization as well as the functioning of the Dublin system. The already mentioned cooperation between Italy and Libya also included a rather systematic practice of pushbacks of refugee boats[61]. In 2012 the European Court of Human Right[62] ruled

[59] This sentence is a of course an argumentative short cut and somewhat of a simplification. Cyprus, Malta, Greece, Italy, Portugal, and Spain were affected to different degrees, due to different geographical positions of being end points and transit points in the (shifting) travel routes of irregular migrants. While Greece, Italy, Cyprus, and Malta were and are heavily affected, Spain was only partially affected(here in particular the Exclaves Ceuta and Melilla) and Portugal hardly at all (concerning the time period that this chapter covers). Their capabilities to protect their borders also differed.

[60] So far, the Dublin IV Reform is still not realized and the subject of debate among the Member States, the EP and the Commission.

[61] Pushback stand for the practice of intercepting refugee boats and towing them back into Libyan waters so Libya would take them back.

that these operations did violate principles of International Human Rights, such as the principle of the Non-Refoulement[63] and along with that Libya could not be considered a safe country for refugees to return to. This judgement did not only outlaw the concrete practice of push-backs and denounced the situation in Libya, it also undermined the strategy of externalization in general as it clarified that the human rights of refugees sent back to countries of transit must be guaranteed by law and fact in the countries of transit to which they are sent back. Thus, it was as also targeting the legal pre-condition of the strategy of externalization, as this was not the case in many of these countries.[64] The other court cases concerned the Dublin system. Already in 2011, in the case *M.S.S. V Belgium and Greece* the ECtHR[65] decided that an Asylum Seekers rights were violated by both states due to the inadequate conditions in Greece. Greece by being responsible for these conditions which amounted to a violation of Article 3 ECHR, the prohibition of torture, and Belgium by sending him back to Greece. In 2011,and confirming in 2013, the CJEU referring to the rights enshrined in the Charter of the Fundamental Rights and building upon the case law of the ECtHR established that the Dublin rules do not preclude applying and respecting human rights when sending back applicants to the country where they entered. If the conditions there are

62 Legally and factually border protection is still in the hands of the European Member States, Frontex is still rather a coordinating agency, and Frontex Missions are staffed by member States border guards (Mrozek, A. 2017, p. 84-96). As in turn all Schengen Member States are Members to the ECHR, as are all EU member states, the case law of the ECtHR creates effects beyond the participants of the case.

63 The Principle that a refugee should not be sent back to a situation or place where he/she/they would be in danger, Enshrined in Article 33 of the 1951 Geneva Convention on Refugees but also in the Article 19.2 of the Charter of Fundamental Rights of the European Union. Other Rights that were violated were prohibition of collective Expulsion (Art. 4 Protocol Nr. 4. Of the ECHR). The Judgement also clarified that it is obligatory to guarantee the rights of the ECHR when acting in International Waters (which includes the responsibility to save lives as well to process applications for protection also outside the territorial waters of a Member State).

64 The Case is Jamaa Hirsi and Others V. Italy (application no 27765/09) and can be found here: https://hudoc.echr.coe.int/eng#{%22dmdocnumber%22:[%22901565%22],%22itemid%22:[%22001-109231%22]}

65 M.S.S. v Belgium and Greece [GC], Application No. 30696/09 retrievable via http://hudoc.echr.coe.int/eng?i=001-103050

so appalling that they amount to a breach of fundamental rights refugees should not be sent back.[66] This seriously undermined the logic upon which the CEAS was built. It had the effect that national courts suspended sending people back to Greece and specific cases to other Dublin member states with reception conditions considered problematic as well. The decision also effectively removed Greece from the Dublin system (EctHR, 2011, CJEU, 2011, CJEU, 2013, Kasparek, B. 2017b, pp.89- 90, Hess, S., Kasparek, B., Kron, S. et al. 2017, pp. 9-11).

Besides these legal developments the European border regime also suffered a crisis of legitimacy that partially changed policy. A number of Shipwrecks most notably the one nearby Lampedusa in October 2013 in which almost 400 died, put the tragedies at sea into the focus of a wider public. While the EU Institutions did not change their course; Italy acted and established with Mare Nostrum the biggest and most comprehensive search and rescue operation at EU maritime borders until today which saved about 170.000 people. Mare Nostrum was followed by smaller Frontex led Operation Triton, which had a stronger emphasis on border protection rather than search and rescue and went on until 2015.After a period in which the EU and Member somewhat retreated and left search and rescue to merchant ships and an increasing, small flotilla of humanitarian SAR-NGOs[67]. After even bigger disasters (two shipwrecks in in April 2015 killed 1200 people alone) the SAR rescue operations of Frontex were extended again and supplemented by the military policing operation EUNAVOR- Med. e character of these operations was janus-faced always mixing humanitarian acts and border policing with Mare Nostrum being the most humanitarian and EUNAVOR-Med arguably the most security oriented one. Likewise, the relationship with the SAR-NGOs is a complex one oscillat-

[66] The most relevant cases are Joint cases- C-411-10 and C-493-10, Joined cases of N.S. v United Kingdom and M.E. v Ireland and CJEU - C-4/11, Bundesrepublik Deutschland v Kaveh Puid retrievable under http://www.asylumlawdatabase.eu/sites/www.asylumlaw database.eu/files/aldfiles/C-411_10%20NS%20and%20ME.pdf and http://www.asylum lawdatabase.eu/sites/www.asylumlawdatabase.eu/files/aldfiles/CJEU%20-%20Puid% 20C-4.11.pdf (also retrievable from the CJEU website).

[67] SAR= Search and rescue

ing between full integration into the Mediterranean SAR system, implicit division of labour and criminalization. Most importantly these operations and initiatives undermine the deterrent effect that an insufficiently SAR- covered Mediterranean might have had. In particular Mare Nostrum increased the number of arrivals. Combined with Italy's practice of de-facto allowing the continuation of the travel of migrants towards northern Europe, it caused a first disposal of Schengen rules in 2011. The massive criticism towards Mare Nostrum led to limitation (in humanitarian fervour and geographical scope) as well to a Europeanisation (through the EASO and Frontex) of the follow- up operations (Heller, C., Pezzani, L. 2017, pp. 215-231).

The most important factor, providing the backdrop of all these developments was the Arab spring and its aftermath which led to the collapse of the strategy of externalization. Until the start of the Arab Spring in 2010 the strategy of externalization seemed to work. The authoritarian regimes of the Arab and Maghreb region were fulfilling their role as buffer zones that they were assigned to in the strategy. When they unravelled or entered into periods of short or prolonged periods of turmoil, or as in the case of the Libya and Syria, prolonged periods of anomy and civil war, they not only failed to fulfil that role any longer. Quite the opposite. The situation created wave after wave of flights for different reasons. Already the collapse of the Ben-Ali regime, which was a stable partner in the externalization strategy, in 2011 had the effect that about 30.000 [68] mainly young Tunisians, made it to Italy. As the other European states refused to take in some of these refugees, the Italian government sent them further north, which led to the first of several suspensions of the Schengen rules by northern states. The turn of the West against the Gadhafi regime, another crucial puzzle piece of the externalization strategy, the Libyan civil war, Gadhafi's downfall and the ongoing disintegration of the Libyan state was even more fateful. When the civil war in Syrian started European policy-makers hoped to keep the increasing numbers of refugees in the region by a de facto containment policy. They left dealing with this new up-

[68] This was the number arriving until the due date for a re-admission agreement reached between the Italian government and the Tunisian provisional government.

surge in refugees to Syria's neighbours, which were, as for example Egypt, often in political turmoil themselves and now had to deal with the about 4 Million Syrian refugees that found refuge there (Kasparek, B. 2017b, pp.83-86, Hess, S., Kasparek, B, Kron, S 2017, p.9). In the meanwhile, the numbers of migrants, with some ebbing trends and shifting routes, kept rising. On the central Mediterranean route, from Libya across the Sea, numbers rose from 15900 in 2012 to 40, 000 in 2013 to 17.0664 (Frontex, 2019 b).[69] Nevertheless the number of people as well as the route they took in the 2015 hit the EU unprepared. During the first half of the year 2015 the numbers departures from Turkey to Greece increased and the Balkan Route which was one of the less travelled routes (around 20.000 People in 2013 about 43.400 in 2014) and became increasingly popular. The aggregated Frontex statistics for the whole year 2015 count 76.4038 Persons on the Balkan route[70] (Frontex, 2019 c). In the first quarter of 2015 the numbers rose to 44.013 and 56.804 in the second (Frontex, 2015a, Frontex, 2015 b)[71]. Nevertheless, the focus of European policy-making and the European public was still on the debt crisis and as far as it comes to migration, on the Mediterranean Sea route. The already mentioned shipwrecks set the operation EUNAVOR-MED[72] in motion and the Commission seized the momentum to present its long prepared European Agenda on Migration, the EAM (European Commission 2015, Kasparek, B. 2017b, p.98-102). The Document tied in with existing policies, focusing on a Europeanisation of border control as it would have been expected from the institutional role of the Commission. The most innovative aspect was the idea of a relocation mechanism for refugees with good chances of being granted protection aiming at the relaxation of the burden of the front-line states and the declara-

[69] Numbers for the different routes can be found on the Frontex website frontex.europa.eu under the heading migratory routes. N.B. these numbers show the numbers of detected migrants and are not estimates of all migrants that might have arrived via these routes. If not otherwise indicated y statistical data in this section fromis taken fom this source. If the numbers are rounded, the rounding was done by the author of this thesis.

[70] Called the Western Balkan route in official Frontex terminology.

[71] The third quarter report of Frontex (Frontex 2015 c) indicates the number of arrivals on the Balkan route with a rounded 81000.

[72] Also known as Operation Sophia

tion of the certain areas of the border to so-called hotspots, giving European agencies (Frontex, EASO, Europol, Eurojust) grounds for Intervention and Support. Interestingly the decisions of declaring hotspots should be made based on Eurosur data and the measures explicitly also aimed at improving Eurodac data. The response of the member states unwillingly to cede sovereignty was lukewarm and only the relocation mechanism was accepted, yet not realized (Kasparek, B. 2017b, pp.98-102, European Commission 2015)[73].

In the meantime, conditions in the refuge encampments in the states bordering Syria deteriorated. The situation was caused by a lack of funds provided by international donors, so that even food rations were cut (Ther, P. 2017, p.296). The knowledge of the hopelessness of the situation led to mass departures of refugees, often coupled with a high degree of self-organization learnt in the Arab spring (Hess, S., Kasparek, B., Kron, S. 2017, p. 9, Moving Europe, 2015a). These movement, benefited by a decrease of control of in the Aegean Sea since the beginning of the Syriza government coupled with a change of Macedonian policy, opening up the country as a country of transit[74] (Moving Europe, 2015 a). Refugees increasingly focused their movement on the Balkan route and the numbers on the Balkan route kept increasing to a point that a whole new dynamic developed. In the third quarter numbers reached 614 97 and in the last quarter of 2015 1336013 people on the Balkan route which amounts a whopping increase of 3492 % compared to the last quarter of 2014 (Frontex, 2015 c, Frontex, 2015 d). The sheer number of people created a strong dynamism and the states along the route found it increasingly difficult to cope with the masses of people travelling through their territory. As most of the refugees were aiming at Germany, Austria and Sweden and very few wanted to stay in the states along the Balkan route (Greece, the non –EU Member Macedonia and Serbia, later Croatia and Hungary). These countries in turn acted with a mixture of waving through and attempts to stem the flow.

[73] Another interesting aspect of the document is the explicit link between JHA Affairs and CDSP, which was also express in the very set –up of EUNAVOR –MED (European Commission 2015, p.3)

[74] By handing out transit visas.

In the time span from roughly July 2015 until March /April 2016 the drama on the Balkan route unfolded. A pattern emerged by which migrants, often in an organized fashion, but also often in an emergent disorganized fashion tried to fight their way to northern Europe, while the countries of transit acted mostly in a crisis –driven ad-hoc modus and tried, only partly successfully to intern, stop, and steer the migrants (Kasparek, B., 2017a, pp. 38-50). In the meantime the countries of transit also practised (by a differing degree and with differing motives) a waving through policy, with one very crucial aim being to pass the burden the migrants were (and were perceived as) and not to end up as the last country having to cope with the increasing backlog of migrants once the borders have been closed. As neither Macedonia nor Serbia are Schengen and EU Members, and Greece was de facto out of the Dublin system, Hungary would have been the country of entry and destination for the migrants on the Balkan route according to the Dublin rules, a situation both, Hungary and the majority of the migrants tried to avoid. The manoeuvring of the transit states often had the character of a pass the buck exercise where transit states actively transported migrants to the borders of their neighbour or at least did not hinder their travel (Kasparek, B., 2017a, pp. 38-50).In the meantime first Macedonia tried to close its borders, but then had to give in to the number of arrivals and the direct resistance of the refugees (and the political impossibility of using too much force in front of the worlds eyes) (Moving Europe 2017, pp. 236-255). Meanwhile Hungary followed a policy of building a border fence, and interning, deterring and humiliating migrants (Kasparek, B., 2017a, p 40). When Austrian police (on August 27) detected 71 fallacies in a smugglers truck this caused the temporary sealing of the borders and thus created backlog. The early days of September 2015 were a turning point, migrants were gathering in Hungary where the Hungarian government attempted to stop them (Kasparek, B., 2017b, p. 103). They, however, encouraged by earlier rumours about German hospitality,[75] resisted these attempts and started a self

[75] At this point in time the decision to suspend Dublin rules for Syrian Refugees in Germany was not much more than a leaked internal non-binding guideline in the Federal Office for Migration and Refugees (Kasparek 2017 a, p.41)

–organized move towards Germany and Austria. On the 5th of September Germany actually decided to take them in and did not close the border for the next months to come. As Germany, together with Austria and Sweden, were the main destinations of refugees and hardly any refugees wanted to stay in the countries of transit, the numbers stayed consistently high, and were still hard to limit. What emerged was a de facto implicit agreement between the security agencies, that it was better to steer the flow of people than to try to resist them. The result was a humanitarian corridor in which the hitherto smuggler-based and self-organized travel of almost a million people throughout the year 2015 was increasingly state organized, as long as Germany and Austria kept their borders open and the route was not cut in between (Kasparek, B., 2017b, pp. 38-50, Moving Europe 2017, pp. 236-255). Only the Joint Action Plan of Turkey and the EU and the parallel physical closure of the Balkan route in March 2016 ended that Situation. On a political level Germany's act of not closing the borders and the subsequent development of the humanitarian corridor was a clear break with more than 30 years of erecting the border regime. Right from the beginning of Schengen, the construction of a common border protection regime was part of the plan. And as far as common policies, as well as, exceptions notwithstanding, national policies, were concerned, they more often than not, aimed at reducing the influx of people and deterring unwanted migration. Unsurprisingly other European governments resisted. In the next months a fault-line among European governments and institutions emerged on how to solve the crisis. On the one Hand there were those governments, in particular Germany (with some allies) who tried to achieve a Europeanized solution, which would have also included a distribution of refugees. This policy was also related to the policy of not closing the borders which was quintessentially a German and Austrian and, in the end, a German policy. On the other hand were those governments in particular those of the Visegrád Group (Poland, Hungary, Czech Republic, Slovakia) and later Austria as well, favouring a swift closing of the Balkan route and a nationalized refugee policy including a very restrictive policy about taking in further refugees. It is arguably not an exaggeration to state that the conflict and power struggles about how to resolve the refuge crisis in 2015 was much about competences and national sov-

ereignty as about refugee and migration policy, as was exemplified by the harsh power play between the proponents and opponents of an distribution of refugees in the Council in September 2015 (Alexander R., 2017, pp. 89-101).During the second half the year 2015 and the first half of 2016 a reluctant de-facto consensus between the two factions emerged that the open border policy was politically unsustainable and the question was not any more if the borders and Balkan route would be closed again, but how and as part of which political solution.[76] The race of which solution would have prevailed was a tight one, and in the end the Balkan Route was closed when Macedonia closed the Idomeni border point, after the other Balkan route transit state had successively closed their borders, and the EU-Turkey deal, probably even more importantly so, lead to an effective policing of departures in Turkey. This prevented the creation of a backlog in Greece (Alexander, R., 2017, pp. 219-238). The later aspect was a crucial one for the proponents of the deal with Turkey as it took pressure of Greece, whose destabilization was feared by some actors (Alexander, R. , 2017, p.230). Some observers argue that the opening up of the borders of Germany was more of a security-oriented measure than a humanitarian act with Germany acting as “refugee receiving country of last resort” (Kasparek, B., 2017a, p. 50).This appears to be similar to its role in the debt crisis, with the aim to prevent a further destabilization of the EU (ibid). The EU-Turkey deal allowed for a cautious continuation of the European Union’s border regime and tied in in with the EAM and was actually a continuation of

[76] The word politically unsustainable is used here as it is questionable if Europe would have not been capable to take in even more refugees, given that they would have been distributed in the EU, a 28 Nation polity with about 800 Million inhabitants. However, this would have hinged on other EU governments, other than Germany, Austria and Sweden, willingness to take in refugees and the willingness of those former governments and- crucially - their population- to eventually take in more refugees. At March 2016 at the latest, rather around new year’s 2015/16 if not earlier, none of these political conditions was given any more. Historically European Nations have taken in significantly higher numbers of refugees in boundary conditions that were significantly more adverse than those of the year 2015. Phillip Ther for example estimates about 20 million refugees in post war ravaged post -WWII Europe, and about 12 million Refugees in post WWII Germany alone (Ther, P.,2 017, pp.118-119) While a direct comparison of historical events is not the most appropriate method, such numbers still help to put the sometimes apocalyptic discourse around the refugee crisis into perspective

the older strategy of externalization. In the end it is hard to assess which side has won the conflict, in particular as the fault lines went through governments, administrations and populations. The European border regime as such has survived the crisis though, it is not precisely working as it supposed to be given the fact that Schengen is still partially suspended and the Dublin rules still are not fully applied. The prevention of departures is the only part of the EU-Turkey Action plan that has actually been implemented (Moving Europe, 2016, Alexander, R 2017, pp. 273-275. A full re-nationalization of the border regime did, however, not take place, still the national states re-asserted themselves as actors in the border regime, although it can be questioned if they ever really gave up much power in the first place. The power struggle about re-nationalization or Europeanization is not decided and the European border regime hangs in a precarious balance, a frozen policy conflict if you will, capable of breaking out once arrival numbers rise again (Soykan, C. 2017, pp. 52-60).

The crisis broke out on the basis of the described structural problems and the failing of the externalization strategy due to the Arab spring and its consequences. The level of organization of the migrants, their sheer mass and the dynamic of the crisis (and the power struggle about its resolution) drove it. Both, the de-facto state corridor and the closure of the Balkan route, did not solve the underlying problems they just steered and then stopped the migrants. None of the structural problems have been resolved; there is neither a real compromise nor a real new system in sight. The relative quiet hinges on the willingness of Turkey to keep the deal, a deal which is in it riddled with legal and practical problems.

Furthermore, nothing indicates a resolution to the problems that drive people to flee to Europe in the first place. Thus, it seems as a matter of time until the next refugee crisis, or rather the next intense cycle of the permanent refugee crisis appears again at Europe’s borders.

2.11 Chapter conclusion

To sum up the European border regime can be characterized as being security driven, aiming at deterring migration, determined by a strong tension between a strongly intergovernmental set up, an assertive role of member states colliding with a long-term trend of policies towards Europeanization. Europeanization is sometimes vehemently contested by the member states (for example the re-distribution of refugees) and sometimes supported by a broad consensus between member states and supranational institutions (for example between the Commission and the member states if it comes to the extension of border surveillance).[77]At the root of the border regime lays the paradox that the European economy needs migrants and migrant labour, while in the meantime there are very strong concerns about the effect of migration in both the policy elites and the voting population. This is particular true for unregulated migration. Furthermore, there always was an unregulated high migratory pressure beyond what was required for the European labour market. And given the deep structural roots is unlikely to fade away in the foreseeable future. From the mid-1970s onwards many western European states attempted to regulate migration (labour migration and refugees) by the means of a restricting access and securitizing the policy field, leaving asylum procedures as the only pathway to western Europe for many migrants. When construction of the European border regime began in the early 1990s, the paradoxes of migration policy remained while the same approach was followed. As there is no common European migration policy the border regime, and its surveillance technology, are used as substitute for a migration regime.

The development of the European border regime was driven by accentuated concern for security, which means that from the beginning it was imagined as an addendum to the national border regimes and substitute of internal border controls. It can reasonably argued that the creation of what the author of this

77 The Position (s) of the EP towards the subject of border surveillance technology is often yet another story.

thesis would call the internal border space in the frame of such policies such as integrated border management, has not necessarily decreased the intensity of control and might even have increased it, although such a hypothesis would need to be empirically tested until it can really be asserted. That the border regime is being situated in the domain of JHA was a logical consequence of this concern, although it also certainly comes from the by now traditional categorization of migration[78] and border security as interior and security policy. The emphasis of security also partially explains the role of security /surveillance technology among policy-makers in the domain, to which will be discussed in chapter 4. To a certain degree this stems from the institutional logic of the field, although this is only one aspect in explaining its growth in recent decades.

The European border regime never had a focus on enabling migration, the whole legal and political edifice aims at deterring migrants. From the Dublin regime to the CEAS it was aimed at reducing migration and treated migration as a liability rather than an asset. The distribution of migrants was the subject of harsh power struggles among the member states. The idea of treating migration of third country nationals and flight as a chance for both the migrants and refugees as well the receiving society was, not absent but was not very prominent either. Meanwhile the incidental effects of this regime of sealing off the borders stands in stark contrast to the normative ideals of the European Union.

Border control as well as migration policy always were politically sensitive issues and are still by and large under the control of the national state. It is thus not very surprising that the member states were not willing to cede too much sovereignty in such a crucial issue. This led to a continued dominance of national governments in decision-making in the JHA field, as well in decision-making about migration/refugee policy as a specific sub-set of this domain. The inherent tension between the desire to keep this field of policy in the national domain and the need or political desire to Europeanize it was and is in-

[78] Categorizing migration policy, a part of security policy became customary in western Europe in the 1970s and 1980s (Kasparek, B., 2017b p.17)

herent in the setup of the policy of the field and even the institutions. An example can be seen the position of Frontex who coordinates national tasks, border control, and national teams and equipment’s while being an EU-agency and arguably also a tool for Europeanization[79]. The refugee crisis of 2015 did not create these tensions, it just made them more visible and virulent and escalated the power struggles that existed all along. Practices of compliances and non-compliances with European law and also technology, see Greece’s effective non-compliances with Eurodac, where tools in power struggles about competences and the right policy (Alexander, R., p.100). Given the disparate interests of the actors (including refugees and countries of origin) it is unlikely that a regime which is satisfactory for all actors involved will be realized soon. This is one factor the European border regime can be seen as a precarious one, as its functioning hinges on compromises in a policy field where some actors are determined not to not compromise, and are neither very fond of implementing the rules to the letter. The volatile character also hinges on the de-facto reliance on the strategy of externalization, before the crisis and now again after the EU-Turkey Deal and the renewed cooperation with Libyan political actors. Then again both Erdogan’s increasingly authoritarian Turkey as well as civil-war factions in Syria or authoritarian regimes in other parts of the Middle East and Africa (not ignoring the emerging democracies that are also partners in the externalization strategy) makes the most reliable partners. Until there is real democracy and stability around the EU, the border regime is only as solid as the political partnerships it is built upon.

In the meanwhile, there is a surprising stability in the border regime and its policies. It never completely collapsed on all fronts, not even in 2015. The strategy of externalization and its design of concentric rings has been around twenty years and longer, and is in principle as old as the very beginning of the

[79] For an Explanation of Frontex’s legal status and modus operandi see Mrozek, A. 2017, pp. 84-96

border regime itself, [80] The same can be said about the attempts at a stronger Europeanization. The security policy programmes (Tampere, Hague, and Stockholm) and integrated border management such a prominent role in this chapter as they show this continuity. They also show the continuity of the extension of border surveillance technology and the border surveillance regime, the topic of the next three chapters.

[80] Wolfgang Schäuble organized a similar deal to the EU-Turkey Joint action plan back in 1985 (in this case he was the head of the chancellery) with the GDR in order to prevent the mass arrival of Tamil refugees. When he formulated his own strategy for dealing with the 2015 crisis, consisting of three ‘rings’ (1. Europe’s neighbouring Regions and refugee camps therein, 2. The European Borders and hotspots at the borders, The Schengen area itself and Germany), he did not only echo his own old strategies but also other concepts of Externalization that have been around for a long time as they are expressed in papers, as the already mentioned Austrian policy paper from 1997 shows (Alexander R ,2017, p.140-143, Hayes, B., Vermeulen, M. 2012, p.14).

Chapter 3: The European border surveillance regime as a power structure

The subject of this chapter is power. Its sources and its forms. To be more precise it is about power and surveillance. The chapter deals with a specific structure of power that is in the process of being created: the European border surveillance regime. The relevant issue here is the power structures that set its creation in motion and the power structure that emerges through it and the effects it creates.

The beginning of a theory chapter is the appropriate place to acknowledge that a thesis on surveillance policy and power is situated in a long and broad tradition of scientific research dealing with similar research problems. Issues of surveillance, control and borders have been getting increasing scholarly attention in a number of fields and traditions which form a spectrum into which this thesis can either be situated with, or with which it shares affinities and common theoretical sources. By its very subject matter this thesis becomes part of the interdisciplinary field of European Studies. It also draws from the discipline of European law as a tool, although it is not a law thesis. The study of Justice and Home Affairs as a policy domain and Justice and Home affairs as a subfield of European Studies and European law emerged as research area that might not be central to the subject area but it produced a number of dedicated experts and publications (for example Fletcher, M., Herlin-Karnell, E., & Matera, C. , 2017, Peers, S., 2016a, Peers, S., 2016b, Peers, S., Moreno-Lax, V., Garlick, M. , Guild, E., 2015) and found its way into the legal textbooks (for example Craig, P. P., De Búrca, G., 2015, pp. 964-999). This dissertation also falls into the subject matter of the interdisciplinary research area of surveillance studies, centred around the Journal Surveillance & Society which has dealt with issues of border and surveillance for a long time (for example Surveillance & Society, 2008, Amoore, L., Marmura, S., Salter, M. B. , 2008, Bennett, C., Regan, P. M. 2003, Geschrey, R. 2011). While not directly drawing from it this thesis certainly shares a strong affinity with the communi-

ty of critical security studies organised around the Journals Cultures et Conflicts and International Political Sociology (Cultures et Conflicts, 2019, International Political Sociology, 2019). Political sociology is also the field where the issue of power structures, and power structure research, and its theoretical adversaries, are situated. Power structure research is a US centric field that had relatively little to say on EU issues, exceptions not withstanding (Krysmanski, H.J., 2007). However, the precise analytical apparatus of power structure research, especially the version of G. W. Domhoff combined with the historical sociological research of Michael Mann makes it a suitable tool for resolving the research question and therefore is one of the main sources for discussing power in thesis (Domhoff, G. W 2014, Mann, M. 1986/2012, 1993/2012, 2012, 2013). Using Michel Foucault's works for theorising the power effects of surveillance (Foucault, M. ,1995/1975) and links this dissertation up with critical security studies, surveillance studies and post-structuralist theories. The emerging field of critical migration studies and border regime studies also had a significant influence (Heimeshoff, L. M., Hess, S., Kron, S. et al. 2014, Hess, S., Kasparek, B., Kron, S. et al. 2017, Kasparek, B., 2017b). This PhD thesis is institutionally situated into the research area of technology assessment.

Power and surveillance, the subject of this chapter have been an interlinked topic, particularly in surveillance studies, since the inception of the field. Foucault's seminal *Discipline and Punish* and his concept of panopticism, which will be presented in detail below, started the discussion (Foucault, M. 1995/1975, pp. 195-228). Foucault's disciple Deleuze picked up where Foucault stopped while breaking with Foucault's panoptic framework. In his short but extremely influential text "*Postscript on the societies of control",* he argues that disciplinary project *des*cribed by Foucault was one of the enclosure of space. He argues that corporations have replaced the factory as modus of production and centre of power, and that surveillance and control now focus on streams of data and the digital double of the person the "dividual" rather than the actual body (Deleuze, G. 1992, pp. 3-7). Since there have been a range of theorizations of power and surveillance, many of which still follow the footsteps of either Foucault or Deleuze or basing their analysis on other

theoretical foundations, for example Marxism (Galic, M., Timan, T., Koops, B. T. 2017, pp. 9-36).

This thesis is going to deviate from this path and instead rely on Michael Mann's network theory of power and G. W. Domhoff's formulation of power structure research for the theorisation of *power structures* while Foucault's theories on panopticism will be used for discussing the *form of power* that is created through surveillance.

The reasons are grounded in the subject matter. What is of interest here is the creation of a border surveillance regime. Here, the term regime does not denote a regime of truth in the sense of Foucault, but a constellation of actors, laws, power relations and technology as defined in the introduction. Such a regime is a decidedly political constellation. This means it is also a power structure. In the introduction politics was defined as the issue of "who gets what, when, how" (Hill, M., 2007, p. 13) Such a definition of politics entails the distribution and the decision-making about the production, achievement and distribution of desirable goods or a desirable status. This goes along well with a definition of power of either a collectivity to muster the resources to achieve its goals, which is the definition of collective power, or of a group or collectivity to prevail in conflicts against its rivals in conflicts inside the polity, which is the definition of distributive power (Domhoff 2014, pp. 2-3). The regulation of access to desirables, does also entail the existence of a decision-making structure inside the polity. A decision-making structure or mechanism does not automatically entail a power structure. Mankind spent most of its existence without power structures or with little power structures and permanent stratification (Mann, M. 2012/1986, p. 34). However, the process of the coming about of power structures as such is not the issue here. It is a safe assumption that in contemporary industrialized mass societies the decision-making structure deciding upon who gets what, when, how is going to be institutionalized, stratified and hierarchical and centralized and thus constituting a power structure.

Following up here a power structure is defined in the following way:

“A ‘power structure’ is a network of organizations and roles within a city or society that is responsible for maintaining the general social structure and shaping new policy initiatives. A ‘power elite’ is the set of people who are the individual actors within the power structure. Because the social order maintained by the power structure is a stratified one, with great inequalities of wealth and income, a power structure is also a system of organized domination and the power elite often will use intimidation and coercion on its critics and opponents if necessary” (Domhoff, G. W., Dye, T. R. (eds.) 1987, p. 9).

The European Union as a polity obviously has a power structure of its own. As the actor constellation in the different policy domains of the European Union differ, each policy domain has a slightly different power structure and the same goes for Justice and Home Affairs. The European border regime also constitutes a power structure. The border regime regulates the access to Europe, and thus already regulates access to a desirable good. Along with this comes the regulation of rights. Examples are the right to freedom of movement inside the Schengen area or the right to work. It also regulates the distribution of material benefits. Furthermore, the policing of the borders obviously also includes the use of force, so does the interment of migrants. Thus, it is very much a system of the distribution of authority among groups and individuals. This power structure is embodied. It is aiming to control to stop, detect and identify bodies on the move. It is materialized in technology. It is an assemblage of people and their decisions, ranging from policy-makers to street level bureaucrats and refugees, laws and rules and technology. This technology is sometimes simple technology such as a fence and sometimes high-end technologies such as Eurosur. Furthermore, technology has become a locus of power. Whether it has become a source of information for decision-making, a source of surveillance related power through data gathering or even a mechanism of automated decision-making, the surveillance technology itself has become a technological layer of the power structures. Besides introducing this algorithmic form of power, digitalization also alters the spatial and temporal dimension of the projection of power. Thus, the digitalization of border con-

trol brings about new qualities of power, a new form of technologically embodied power structure, which is analysed as a new power structure of its own. It constitutes the panoptic power structure of the European border surveillance regime.

This focus on power as a part of and emanating from power structures signifies a shift of emphasis, from the form of power and its manifestation to its source and structure. Therefore, the issue cannot be approached from the theoretical vantage point of the established theories of surveillance from the field of surveillance studies.[81]

In theorising the border surveillance regime as a power structure, the definition and theorisation of power and power structures comes first, the use of surveillance as a form of power and its effects comes second. For the first step, defining and explaining power Michael Mann's extensive work will be used. For the analysis of power structures, G. W. Domhoff's variant of power structure research will be employed. For the form and the effect of power being created by the use of surveillance technology, the European border regime and its surveillance regime, Foucault's concept of panopticism will be utilised.

3.1 Networks of power

3.1.1 Michael Mann's networks of power

Four the first step of theorising power the four power network theory will be used.

[81] This should not indicate that these theories ignore the aspect of power structure altogether. Deleuze for example explicitly mentions corporations as a source of power (Deleuze, G. 1992, pp.5-7). Surveillance capitalism theorists come very close to the framework used here, although the author of this thesis does not share their underlying neo-Marxist assumption about ultimate primacy of economic power over other sources of power.

The four power network theory was developed by the sociologist Michael Mann through many works in particular through his four volumes opus magnum "*The sources of social power"* in which he applies his framework to the history of mankind. Mann's theory is a radically pragmatic approach towards the question what determines power in society. He aptly described his approach as "organizational materialism" (Knöble, W., Haferkamp, H. 2001, p. 316).

Mann starts from the basic assumption that people have needs that need to be fulfilled and that people organize in networks (one could also use the term organization and or institutions) in order to fulfil these needs and achieve their goals. The competing and overlapping socio-spatial networks that people form in order to fulfil their needs make up society (Mann, M. ,1986/2012, p.1). This pragmatic statement has its consequences. Mann does not see society as an all-encompassing structure, nor a holistic whole. With that approach, he stands at odds with most classical formulations of sociological theory, which tends to theorize a society as whole or made up by sub-sections or levels (Mann, M., 1986/2012, pp. 1-32). He also stays sceptical towards any evolutionary or teleological view on society and its development (Mann, M. 1986/2012, 34-70). This is consistent. If the basic driving force in a society are the needs-driven socio-spatial networks of people and their shifting alliances there is little ground to believe that there is a teleological law guiding it. There is neither perpetual decline nor perpetual progress, neither ultimate doom nor a path to utopia. Only contingency. Once networks of people form, they become a basis of power, as they are the tools that make up the logistics, cooperation and communication and (Mann, M. 1986/2012, pp. 1-32).

Thus, Mann's approach is actor- centric but not focusing on individuals but on collective stakeholders. In the meantime, his understanding of these collective actors such as classes is nuanced. This works for collective power serving all members of a network vis-à-vis non-networked individuals or other networks of power creating forms of collective power. They also tend to create forms of top-down, distributive power. Larger networks tend to create, through a process of a division of labour, positions of oversight and command, allowing

those on the top of a network to control the resources, information and manpower of the network, and to be internally much more powerful than any rank and file member of a given network. The more institutionalized and routinised a network of power becomes the more hardened the social power relation becomes. Mann is very clear about this: oppressed majorities are not coerced, persuaded or manipulated into obedience – they are "organizationally outflanked" (Mann, M. ,1986/2012, p. 7).

Mann stays clear of ontological arguments about human nature or the nature of human needs. With the given definition of society, he also distances himself from many definitions of society common in the social sciences (Mann, M., 1986/ 2012, pp. 1-32). He neither fully follows Weberian assumptions about the full flexibility of the determining factors of society nor submitting to any form of determinism, while still allowing for broad generalization in the form of the four-network theory (Mann, M.,1986/2012, pp. 1-32, 2013, pp. 403-432). His framework also stays agnostic about the question of ultimate primacy. Meaning, while giving primacy to the four power networks, the primacy of one or more networks above the others is of such a variable nature across time and space that there is no ultimate primacy of power, no one crucial factor that determines power in society (Mann, M. 2013, pp. 423-432).

There are different forms of power that emerge in the organizations that are created out from the different socio-spatial networks of people.

One form of power is distributive power. This is the form of power where one actor is pushing through his or her goal against the desires or resistance of other actors, with the benefits or results, of the conflict being unevenly distributed in favour of the actor in a position of power. Collective power is the form of power that is created through cooperation, and which enhances the power of a network, and thus the power of the members of the network, by creating organizations and institutions and making cooperation, logistics, communication, production, division of labour and organized force possible in the first place. Collective power denotes the power of the network to achieve its goals rather than the goals of individuals. The two forms of power, however, are intertwined, the networks that create collective power are not only the

basis of collective and distributive collective power vis-à-vis other networks but also for distributive power within the networks. Mann further differentiates between extensive, intensive, authoritative, and diffused forms of power. Extensive power refers to the ability to organize and control large numbers of people in at least minimal stable cooperation (Mann, M., 1986/2012, pp. 6-10). Intensive power refers to highly mobilized and committed forms of organization, authoritative power implies “definite commands and conscious obedience” (ibid, p. 8). Diffused forms power such as market forces or social norms works without command structures or centralization. However, they can have serious repercussions for those groups receiving their downsides and can impede their progress and capability to organize as much as authoritative power. Mann gives a militaristic empire, as an example for an extensive form of power, the military as an example for an authoritarian form of power, a general strike for a diffused but intensive form of power and market power as an example for a diffused form of power. It is important to note that this taxonomy of power is purely descriptive and does neither imply a moral judgement nor a qualitative judgment, there is no form of power stronger than the other. He stresses the importance of space and infrastructure, including technology, for the exercise of power, on which all forms of power depend. He also stresses the importance of the interdependence among the different forms of power and he terms it the “promiscuity” of power. His networks of power are ideal types that very often in history enmesh, so that one network also carried out the function of the other networks (ibid, pp. 1-32). The reality of power is often messy.

By a broad collection of historical evidence, he comes to identify four networks of power that seem to be crucial as sources of power, in one configuration of power or the other: the ideological, the economic, the military and the political network of power. For that reason, his model is also referred to as the IEMP-model.

The first network of power is the ideological network. It is the network which organizes those aspects of society which give meaning to people’s life, organize its perceived purpose, ethical norms and values and thus gains followers,

resources and influence. It can be religious; the Catholic church is a prime example. It can be secular, for example communist parties in communist countries. It can be independent or interwoven with other networks and being intermingled with politics, which is quite often a characteristic of these networks. There can be several competing networks in a given area or a monopoly on salvation. Players that are influential without being central to policy-making such as NGOs can also fall into this category. The ideological network might get primacy over other networks, as for example the Islamic clergy in Iran.[82] Mann differentiates between two forms of ideological of power: transcendent ideological power and immanent ideological power. The former reaches beyond the political, economic, military, and social institutions. It helps to create a "holy authority" and has the capacity to transform society and create new forms of cooperation, authority and exploitation that were not part of the existing institutional set up. Organisations relying on this kind of ideological power tend to enjoy a certain autonomy vi-a-vis the other networks of power (Mann, M. , 1986/2012, pp. 22-24). He confesses a deep scepticism towards ideology in each and every form (Mann, M. ,2013, pp. 405-406). The other form of ideological power is the immanent moral of a group or a power structure and tends to support its internal norms and values, strengthen its cohesiveness and while doing so, back up the existing power structures. Ideological power is usually a diffuse form of power (Mann, M., 1986/2012, pp. 22-24).

The next network is the military network. In Mann's terminology this term denotes every form of apparatus of systematic organized violence, not just state –controlled armies, thus it could for example also include guerrillas and militias. Furthermore, these networks of violence can also compete in the same area. It is an intensive form of power and the most focused and violent form of power. It tends reach to beyond the territory of the force that employs it, be it for warfare or for indirectly dominating the periphery of the domain of the power structure. Its reach is strongly dependent on the logistical and tech-

[82] The examples in this passage are of the author of this thesis, not by Michael Mann.

nical possibilities of the employing structure. (Mann, M., 1986/2012, pp. 25-26). Mann stresses the importance of the military network for the development of different forms of power (Mann, M., 1986/2012, xii-xiii).

The economic network encompasses all aspects of economic life, from production to distribution and trade. Mann does not differentiate sharply between production and distribution or gives primacy to one of the spheres of economic life, instead he uses the term "the circuit of praxis" to encompass all aspects of economic life. Both spheres, production and distribution are sources of power. Economic organizations include authoritative and diffuse, intensive and extensive forms power. He argues that in developed societies such as our present capitalist one the circuit of praxis binds the broad masses of the populations into relations of power, be it through their involvement into production or through the anonymous indirect forces of distribution, nowadays organized in the form of capitalist markets (Mann, M.,1986/2012, p.24-25).

Classes are important aspect of Mann's analysis of economic power. He defines them as groups formed around the extraction, transformation, distributions and consumption of the objects of nature (Mann, M., 1986/2012, p.24). As the differences in economic power are never fully legitimate class conflict arises. Where "horizontal" forms of economic organization such as familial networks or tribes coexist with the more "vertical", hierarchical economic classes, class struggles stay latent. If vertical classes prevail over horizontal forms of economic organization, they become extensive classes. This level of class development can be one-dimensional, if one form of the circuit of praxis dominates, or multidimensional if there are several forms (Mann, M., 1986/2012, pp. 216-217). Modern middle and working classes are also vertically cut by segments for example the vertically organized workers of a certain industry or the horizontally organized sections of professionals inside a class (Mann, M. ,1993/2012, p.8.). Classes can be national and nationalist as well as transnational (Mann, M ,1993/2012, pp. 31-33). In the later volumes of the *Sources of social power*, these terms (segments and sections) replace the term Circuit of Praxis (Mann, M.1993/2012, p. 7). Classes ought not to be thought as independent from states, the are forms of power relations that

emerged together, especially in the form of the national state and modern capitalist classes (Mann, M. ,1993/2012, pp. 723-730).

Furthermore, there are symmetric and asymmetric forms of extensive classes. Symmetric extensive classes have similar forms of organisations, while asymmetrical classes exist if only one class, usually the ruling class or the ruling classes possesses a specific form of organisation. If a class organizes to either transform or maintain the status quo, it becomes a political class (Mann, M.1986/2012, pp. 216-217). A ruling class then is an economic class that managed to monopolize non- economic sources of power as well, and to dominate a state- centric society as a whole (Mann, M., 1986/2012 p.25). In later volumes, he also uses the term dominant class (Mann, M 1993/2012, p.8)

The last network is the political network. It is that network, which regulates public life, settles conflicts, gives law in particular when doing so in a centralized fashion with clear territorial boundaries – in other words the government, the state. Unlike in the cases of the other networks, while acknowledging the possibility of non –state politics, his definition of the political network insists on a certain degree of territorial control and centralization. Regulation backed by force is not enough, as that requirement that can be fulfilled by other networks of power as well. It needs to be a rule-making network that is centralized, institutionalized and acting within a clearly defined territory. Internal power is just one form of state power projection. Mann counts geopolitical diplomatic power as the second important form of power (Mann, M., 1986/2012, pp. 1-32).[83]State power, according to Mann, can be furthermore despotic or infrastructural. With despotic he denotes a form of state power that rules over society, to make decisions without consulting major civil society

[83] This is the only point where the author of this thesis disagrees with Mann's broad framework. Forms of regulations and norm setting, organization of public life and conflict settlement exist besides or under the radar of the state whether they be they back-upped by military non-state actors or not. They are sometimes dominant, sometimes not. Such forms of social regulation ranging from village councils to de-facto regimes are not a rarity and tend to arise wherever states lose their grip over a territory. Quite often they exist besides governmental institutions. The demarcation with the definition of governments as well with the military networks is difficult, the phenomenon, however, exists.

players in society. Infrastructural power stands for the actual reach of the state, its logistical penetration into society, the capability to power through and actually implement its policy. Both dimensions are important benchmarks of state power (Mann, M., 2012, p.13). His definition of the state is:

"A state is a differentiated set of institutions and personnel, embodying centrality in the sense that political relations radiate outward to cover a territorially demarcated area, over which it claims a monopoly of binding and permanent rule-making, backed up by physical violence" (Mann, M., 1986/2012, p. 37).

Later he argues that modern states functionally and pseudomorphously crystallize into different forms centring on capitalism, class, national identities representation and the degree of centralization and de-centralization (Mann, M., 1993 /2012, pp. 75-88).Which of these issues and fault lines determine the character and setup of a given state varies from case to case. Often but not always it is class. He furthermore embraces from a view in which political, collective power conflicts get consolidated into the institutional setup of state, and determine its future development and expression of collective power, a view that he labels *"institutional statism"* (Mann, M., 1993/2012, pp. 52, pp. 75-88). The term polymorphous refers to the fact, that states are not unitary and different power constellations and/ or crystallizations of statehood can be found in different areas and domains of policy (Mann, M. , 1993/2012, pp. 75).

There is no basic rule how dominant networks and their formations succeed each other in power. It can happen as direct challenge to existing networks of power. However, the rise of networks of power often has emergent properties, and happens unintentionally at the margins of the existing power structures. They exist and organize beside them before overpowering them, a process Mann has called interstitial emergence (Mann, M., 1986/2012, p.16).

3.1.2 G. W. Domhoff's Elite Rule Theory

Mann's framework helps us to understand the sources of power, and it is a suitable tool for analysing power structures. However, he is mostly concerned with long-term structures and to a lesser degree with concrete policy-making. Still in this thesis the emergence of the power structure is analysed as a process of policy-making, and policy-making embedded into power structures. For that purpose, a theory that is suitable for a more fine-grained analysis and that can also double as policy theory is needed. Power structure research as G. W. Domhoff practices it fills in this gap. Domhoff uses the work of Mann as the theoretical backbone of his work and adapts it to the present-day United States. Later this combined framework will be adapted on the case of the EU and EU justice and home affairs. The usage of Domhoff's work is not a break with using Mann as Domhoff is taking his concept of power direct from Mann's work. It is more of a zoom, a closer look onto a specific power structures and specific aspects in particular class) not a change of the frame. In fact, for practical purposes, Mann and Domhoff are considered to be two parts of the same framework in this thesis.

The roots of power structure research go back to the 1950s. Floyd Hunter's *Community Power Structure (1953)* and C. Wright Mills *The Power Elite (1956)* created the field, which exploded in the 1950s and 1960s and then subsequently was pushed to the margins of the social sciences (Domhoff, G. W. 2005 a). While Hunters book was a study of local elites and their influence on policy-making in an American major city (Atlanta), Wright Mills study was a study of national decision-making elites. Starting with publicly available information, approaching different organizations from local companies, civil society and politics, Hunter was able to identify a policy formulating elite through a systematic study of interviews with middle- level management and bureaucrats. In the interviews, he asked them about the most influential power players in the top echelons of their organization and city politics in general. He then repeated the same exercise with the people that came up in this list, which crucially confirmed his findings largely, double-checked by Interviews with community leaders from other, disadvantaged, communities, which in the

1950s southern US of course included people of colour. This method was later dubbed the reputational method. Hunter was able to come up with a set of persons from the local elite whose influencing of the local policy process according to their policy preferences through their interactions, formal and informal, he subsequently studied. Interviews coupled with the study of policy conflict were the main method here again. The picture of the local policy process that emerged was one in which the most significant aspects of policy agenda setting and policy formulation were not formulated in the arena of public discourse by competing interest groups and voluntary associations, but among the power broking local elite he had identified. This did not mean that they always won policy conflicts, always agreed, or that policy proposals, which meet too much resistance, or were expected to meet it, were not dropped. When policy was pre-formulated among these elites, they were fed into the policy process and then implemented by the bureaucracy and the middle-level management.

He concluded:

"The top group of the power hierarchy has been isolated and defined as comprised of policy-makers. These men are drawn largely from the businessmen's class in Atlanta. They form cliques, or crowds, as the term is more often used in the community, which formulate policy. Committees for formulation of policy are commonplace, and on community-wide issues, policy is channelled by a 'fluid committee structure' down to institutional, associational groups through a lower-level bureaucracy, which executes policy (Hunter 1953)" (Domhoff, G. W., 2005b).

Mills argued in *The Power Elite* that a relatively small group of people occupying central positions in business, government and military organizations were constituting an interlocking ruling elite, dominating the formation of policy-making in the USA. While Hunter started his inquiry with the reputation for power, Mills started with the position of people inside institutions, hence the name positional method. He then studied their background and communality in order to identify the groups and classes most often occupying positions of power in American society.

Their analysis caused quite a stir in political science community and in the case of Mill also beyond that, and was not welcomed by the mainstream of the field (Domhoff, G. W., 2005a). Pluralist critics of their approaches claimed that the sources of power rather than power itself were relatively widely distributed. They focused on the outcome of policy conflicts, rather than on who sits in positions of power, a method later called the decisional method. They argued that the outcomes of policy conflicts were relatively open and different interest groups had a fair chance to influence policy in the open market place of ideas (Hill, M., 2005, p. 27-35). They pointed out important gaps in Hunters and Mills argument, however, they were not able to debunk Hunters and Mills main findings (Domhoff, G.W., 2005a). From there on power structure, research developed its claims and methodology.

Despite the resistance power structure, research had short -lived blossoming in the 1950s and the 1960s, before being pushed to the margins of the field again (Domhoff, G. W., 2005a). In the time, it had developed a set of methods and claims but not a definitive theory of power. To this day it is as much a set of empirical methods as it is a theory if not more so. This lack of theoretical dogmatism and the flexibility, adaptability to different contexts, subjects and theories is one of its greatest strengths. In the meantime, it certainly has a certain set of assumptions of the nature of political power, a political, theoretical and scientific epistemology so to speak that is always part of the package when working with power structure research and that needs to be critically reflected when doing so.

These tenets are the following:

An interest in long-term structures:

Power structure research in the style of G. W. Domhoff focuses on the networks of power that structure society and the relationships of power in society, and the long-term agenda setting in policy-making (Domhoff, G. W., 2005c). This does not mean that power structure research is not interested in case studies, they have a definitive place in power structure research. However, it has a

certain emphasis on the structure over the individual case as individual cases of policy conflicts, as well as polities, may well differ from the overall picture.

An emphasis of organizations as a source of power:

This is a very crucial point. Power structure research sees power in modern industrial societies as rooted in organizations, particularly large-scale organizations. From the economy and the pivotal role that corporations and public companies play in it, to the security apparatus made up by police forces, the military and secret services to political parties, trade unions, interest groups, lobby associations and think tanks, especially those who represent large memberships or important interests, in politics. Churches and other religious or ideological organizations which take similar roles in secular society are another important set of players. Power is exercised by those groups, social classes, networks of people, or individuals that are able to control these structures and to keep positions of power within them (Domhoff, G. W., 2005 a). The "left-Weberian" (ibid) perspective of power structure research emphasizes the centralizing, power accumulating qualities of these large-scale organizations. The perspective as well the research subject of power structure research implicates an emphasize on organizations as tools of social domination rather than just neutral tools for organizing society, which of course does not mean that these aspects of large-scale organizations are ignored altogether.

No theory of ultimate primacy:

Unlike many other theories from the social sciences, for example Marxism, power structure research has an explicit openness towards which networks of power dominate a given society and which group of people or interests in turn controls these networks of power. Whether the economy, the military, other sectors of the state, an ideological/religious organization or any other network of power is the crucial source of power in a given society and who controls

this source of power is to be determined by empirical research (Domhoff, G. W. 2005 a, Domhoff, G. W., 2005 c)[84].

A methodological tool set:

What is has, however, is a (flexible) set of methods from the social sciences to answer its research questions which includes the reputational and positional methods developed by Hunter and Mills, and in particular network analysis and content analysis and other methods from the social sciences (Domhoff, G. W. , 2009).

A set of power indicators:

While power is notoriously hard to measure power structure research indicates power "backwards" as a quality of a given group or Institution that can be observed in political processes and in particular political conflicts and series of conflicts.

These criteria are 1. Who benefits? 2. Who governs/who sits? In addition: 3. Who wins?

Number one indicates the distribution of desirable value in society, for example, wealth or good health, which in this context is used as indicators of power. Being wealthy, besides being a source of power in itself, also indicates the possession of power in the first place. The second indicator is concerned with who sits in positions of power such as governments or corporate boards, and it is measured in relation to the overall representation of a given part of the population. The stronger the representation of a given group or stratum the higher the probability that they are a powerful group in a given society. The last indicator looks at the outcome of policy and other societal conflict and traces, which interests groups classes, part of the population, wins them. Here it is particularly important to be careful, look at a number of cases and take into

[84] At least Domhoff argues this way. H.J.Krysmanski for example, who was arguably the most prominent proponent of Power Structure Research in Germany identified as an Marxist, yet an undogmatic one (Krysmanski, H.J., 2007)

account the different possible outcomes before drawing a conclusion[85]. As power and its working are difficult to measure and to observe one is advised to always use more than one indicator before coming to a conclusion (Domhoff G. W., 2014, pp. 4-8).

A normative dimension

From the beginning, power structure research had a normative dimension that is still proudly upheld by its practitioners. In it the analysis of wealth and power has the function not only to analyse it, but to critique it and open up roads to a more egalitarian and participatory and democratic future, as far as this is possible for social science (Domhoff, G. W. , 2005 a).

G. W. Domhoff adopts Mann's framework and adds a specific focus to it. He keeps the four networks theory, and the definition of the different forms of power. However, in his analysis of the distribution of the power in contemporary capitalist societies he clearly gives relative primacy to the economic network and focuses it on a specific form of economic power structure: class.

The core of his argument is that the economic network, which in turn is dominated by a corporate dominant class, dominates American society.

Building upon the four network theory and using empirical evidence obtained from a host of studies by other scholars, as well as his own decade long research using methods from the repertoire of power structure research; Domhoff argues that, due to historical circumstances which are specific to the USA, the economic network became the dominant network, significantly stronger than in other western industrialized countries. The economic network in turn is controlled by a relatively small number of corporations, which provides the lion's share of the country's economy and jobs. Those corporations in turn controlled by a relatively small elite (small in comparison to the popu-

85 There is a similarity to the methods of pluralism here which also looks at decision-making and conflict outcomes in order to determine the distribution of power in politics. One could argue that it supports the case of power structure research if it can use the same methods employed to critique it.

lation not in absolute numbers) of people, which are capable of coordinating their preferences concerning most policies, that concern their most pressing issues, mostly concerning the corporations they either lead or own. Importantly they are also, as long as it concerns their interests, and more often than not successfully so, capable to influence policy-making through their relative dominance vis-à-vis the other networks of power (Domhoff, G. W. 2014, pp. 13-14, pp. 16-202).

In Europe, the strong competition and perpetual military conflict between European powers made a strong state with a strong military necessary, and thus a strong military and political network. Up until the first World War and the second World War II, when the US definitively entered the world theatre as a major power, the military establishment was relatively small. Furthermore, the constitutional setup of the US did prevent a strong central state. The European states were historically dominated by the church, the ideological network, and by a strong landed aristocracy. Even in the 19th century these classes who dominated the, comparatively stronger, political network were able to force the emerging capitalist class to compromise with the likewise emerging labour movement, while in the US the capitalist class, the economic network, was able to bring the state to intervene on its behalf. The result, which is still felt today; is a much stronger dominance of corporate power in the US than in Europe or other comparable western industrial democracies (Domhoff, G. W. 2014, pp. 194-197).

Domhoff analyses social registers, such as the “who is who in America”, memberships in corporate boards, attendance of elite schools, so called prep schools, and leading universities, in particular Ivy League universities. He analyses wealth and income data, money flows to major foundations, such as the Gates Foundations or the Ford Foundation. He also makes a membership and policy analysis of policy planning think thanks and policy discussion groups and interest groups, such as the Bookings Institution, The Council of Foreign relation or the Business Roundtable. He is particularly interested in the personal and organizational interlocks. He looks at the continuity of the distribution of wealth be it from assets or income -the who wins indicator- the

surprising stability of membership of the upper class in the US. He looks as well to the social practices that prepare members of the upper class for leadership positions and maintain social cohesion among it, from prep schools to country clubs. This information was checked against who is either owning, financing, or sitting in the top positions of the aforementioned corporations and institutions – the "who sits" indicator (Domhoff, G. W. 2014, pp. 1-13, 42-73, pp. 74-108).

What emerges is the is existence of vested American upper class, having a considerable ownership, though usually not of the very largest corporations, and influence, for example through the device of family office, or holding companies, in the world of finance and the corporate community. In the meantime, it interlocks with the professionals that actually run the most important corporations, who often come from a different social background though hardly from the lower or lower middle class -strata of American society. The corporations are the cornerstone of the American economy, whose power is not counter-weighted by smaller businesses. The CEOs and managers in the top echelons of the corporate world share the same economic interests and mostly a similar political outlook, and very importantly the same social institutions as the vested rich, thus creating a common social class, the corporate rich (Domhoff, G. W. 2014, pp. 16-73).

However, this alone does not explain the ability to formulate policy preferences nor the capability to be able to feed them into the policy -cycle and win conflicts with opponents such as unions or strong environmentalists. It needs concerted efforts in what he describes as the policy planning network in foundations, think thanks, and interest groups and some universities departments as well as the contacts these groups have with government officials in order to create and initiate policies while in the meantime fighting competing policy proposals (ibid, pp. ,74-106).

It is an interlock between certain members of the upper class, the corporate community and the policy planning network that makes up the most important power structure in the US, what Domhoff calls the "power elite" (Domhoff, G. W., 2014, p. 106). It is important to mention that only parts of these three

networks form part of the power elite, which sits in the top positions of the institutions of these three networks such as being CEOs, sitting in the board of directors or board of trustees. Neither are all members of the upper class involved in the network, nor are all leading members of the corporate world or the policy-planning network. In addition, membership in the dominant class does not automatically lead to membership in the power elite and vice versa. As Domhoff puts it: “Not all members of the dominant class are involved in governing and not all members of the power elite are part of the dominant class” (ibid, p. 105).

The structural power derived from this triangle alone would not suffice to make the corporate rich the dominant class. There is a number of other mechanisms that ensure their dominance. The policy –planning network is able to feed corporate friendly expertise into government structures, a huge lobbying industry is pressuring government on issues of concern to the corporate community, and there is a marked over representation of appointees for government positions with ties to the corporate world or the upper class (Domhoff, G. W. 2014, pp. 74-106, pp. 174-175). The corporate rich also try to influence public opinion through public relations and corporate ownership of media outlooks. However, the steering effect of their efforts on public opinion is less dramatic than it is often believed and the same goes for the effect of public opinion on the corporate rich and government in the US (ibid, pp. 109-130). In retrospection Domhoff describes how the ruling elites used changes in voters’ rights and such manoeuvres as changing voting districts (a process known as “gerrymandering”) to keep disenfranchised voters or their parties from having much impact. Domhoff shows how historically both parties were and are, historically, and in the present, dominated by different sections of the ruling classes.[86] Together with other factors such as the role of primaries and of campaign financing prevented the emergence of an opposing popular tendency inside the parties, while the first-past the –post voting system prevented the rise of a third party (Domhoff, G.W., 2014, pp. 132-140). It ought to be mentioned

86 As he rightly pointed out, European elites historically used similar manoeuvrers to limit the impact of socialist parties, though without much success (Domhoff 2014, p.133).

that the result of the class dominance in the party -system is contingent on the circumstances and rather the cumulative result of the above- mentioned factors. This is shown by the fact that the above-mentioned historical attempts to suppress working class parties through the introduction of proportional representation in Belgium, Denmark and Sweden (Domhoff, G.W., 2014, p.133), did no led to a comparable form of class domination in the long run. Other majority -voting based systems such as the UK have also not ended up with the same result or even the same degree of partisan division.

All the above -mentioned factors contribute to the fact that in the US there is not only a dominance of the economic network but an outright class dominance of the corporate class.

It is important, however, to recognize that this outcome is historically contingent just as the four network theory would have predicted it. Neither the corporate class nor the power elite are a monolithic block. There is fierce competition between the actors. The upper class, the corporate community and the policy -planning- community are interlocked, not identical. Furthermore, there is a general division between moderate and hard conservatives in all networks which is felt particularly in non-class struggle related issues, most astutely in issues of foreign policy. In particular there exists a competing actor coalition he calls the liberal-labour alliance, based in unions, in universities, activist groups and parts of the democratic party with their own representation in congress and their own, much smaller, policy- planning network, partly financed by dissenters from the upper class. This network while losing most policy conflicts was able to gain major victories especially in the field of labour relations in the wake of the new deal (Domhoff, G. W., 2014, pp. 74-76, pp. 102-104 pp. 172-173).

Class dominance in the US is contingent, not inevitable and could be challenged.

In terms of theorisation of power Domhoff works firmly in the framework of Mann. Strictly speaking, Mann's work is simply the theoretical framework for Domhoff's work. The benefit of his work is that he takes a closer look on

more specific policy processes. Mann is more concerned with the broad long-term development, drawing conclusions from comparative historical sociology. His opus magnum is a global history of power. Domhoff is focusing on the power relations in one specific, extremely powerful, state: the US. Through his empirical work, Domhoff creates a set off concepts. These concepts and methodology can be applied to the case of the EU as well. His theory of class domination allows us to sharpen our understanding of the power relations in the EU without blindly adapting it. Both, Mann and Domhoff, subscribe to a non-unitary view of society, in which different, competing socio-spatial networks make up society. Both consider organizations as the basis of the different forms of power. Both see power concentrated in the IEMP-networks. Both agree that these networks distribute power very unevenly in society, as the networks of power tend to favour those on top, outmanoeuvring the regular members. The results are stratified, centralized and hierarchical societies. These stratifications of power often tend to be very entrenched and static, limiting the chances for disruptive changes and social mobility, unless in periods of turmoil and unrest. Both do not believe in the ultimate primacy of any power source. Both furthermore agree that classes are a part of the overall economic power structure, although they tend to grow in importance since the advent of the industrial revolution and ever since.

Domhoff shows, by using the Methods of power structure research and Mann's theory for the case of the US how a combination of unique circumstances led to a particular entrenched form of capitalist class rule. The result is a clearly identifiable power elite, which is strongly class based. With its political factions and the political part of the power elite this power elite steers American democracy inasmuch as it wins most of the political battles that are of concern to it. The power of the American upper and corporate class and its connected policy elites amounts to a form of class domination that is far from absolute yet still extraordinary.

This emphasis on class differentiates Domhoff's approach from Mann's. Mann is aware of many over generalizations in class theory approaches, which tend to downplay the importance of other factors besides class struggle. He

considers both, C. Wright Mills and Domhoff, to be part of a "radical empiricist school" of class theory (Mann, M., 1993/ 2012, p. 46) and attests them to not repeat many errors of other schools of class theories (ibid. p. 49, p. 51), while he himself still is not subscribing to any form of class theory.

In order to analyse the European border surveillance regime as a power structure this common framework will be applied to the EU, the European border regime and the European border surveillance regime. In a preceding step the next section will zoom in towards the effects and forms of power created through surveillance and the border surveillance regime.

3.2 Panoptic networks of power

3.2.1 Foucault's theories of panopticism

In this section Michel Foucault's concept of panopticism as one the first of and foundational concepts of surveillance studies will be introduced and adapted to the case at Hand. It will be used primarily for the conceptualisation of the practices and the effects of surveillance, and its roots in his concept of Discipline, less than a theorisation of power as such, as this is already covered with Mann/Domhoff. Foucault's empirical treatment of the nexus between knowledge and power allows the description of the specific form of power created through surveillance.

Foucault developed the concept in his seminal work *Discipline and Punish* (Foucault, M., 1995/1975), which marked a turn of Foucault's work towards taking power into the centre of his thinking a process that had begun with *The discourse of language* and was continued with *The history of sexuality: the will to knowledge* (Honneth, A., Saar, M. 2016, pp. 1655-1657).

The work describes the shift from corporal, public and spectacular punishment towards a generalized practice of imprisonment in Europe, taking this shift as puzzling development and its causes as a research question. France and Eng-

land exemplify the process in the time frame from the end of the Ancien Régime to the mid-19th century. Along with this shift went the creation of a new model of power presumably more humane, yet in the meantime even more intensive, of power relationships, taking the body and maybe even more so the psyche of the punished into focus. It gave birth to disciplinary power, which is an attempt, to isolate, to sort, to organize, to steer, to modify, and to reorganize collectivities and individuals. It is closely linked up with hierarchical power and the capability to maintain a hierarchical power relationship.

Through the concepts of discipline and panopticism he carved out the epistemological link between knowledge and power, how power is created through knowledge and knowledge is an effect of power. Furthermore, it is a form of power that is embodied into bodies and artefacts. This power knowledge nexus is a continuous theme throughout Foucault's work (Fink-Eitel, H., 1997, pp. 7-21). However, as only *Discipline and Punish* deals explicitly with surveillance as an expression of power and specific form of power it is the only work discussed in this thesis. As panopticism cannot be neatly separated from discipline and is conceptualized as arising out of discipline both concepts will be discussed.

The starting point of Foucault's argumentation are the very visible, very public, and in the very sense of the word spectacular forms of corporal punishments of the Ancien Régime and the legal systems in which they were embedded. They were quite literally an embodiment of the absolute power of the embodied, and personified sovereign of the Ancien Régime. They were embedded in legal procedures that were reminiscent of the inquisitorial logic of medieval and early modern legal procedures and a not only economically, but also legally stratified society. Order is not produced by a law born out of an idea of a social contract of nominally equals re-producing its order, but by the sovereign standing above society and reproducing order by destroying the bodies of those who rebel against him (Foucault, M., 1995/1975, pp. 3-72).

In the late 18th century, before and after the French Revolution, this legal economy was changed towards a new application of the law in a more unified egalitarian fashion, as well as towards a reduction of corporal punishments.

The roots of this development were manifold and expressed desires to make the law more effective and replace the sometimes hereditary, partly arbitrary parallel system of justice of the Ancien Régime. Instead, what was needed was a legal system being compatible with the increasing necessity of the protection of property rights in the emerging capitalist regime. Particularly, after the French revolution, the need of creating a legal system and a system of punishment compatible with the democratic contractual theory of society became eminent. The emerging bourgeois state and society needed to replace the logic of bodily destruction of the sovereign's punishments, with a modus of punishment suitable for a society of legally equal, male, citizens bound by a contractually based law encompassing all of them.

Still, this does not answer the question why the prison became the main modus of punishment, while other proposed forms of punishments, such as "theatres of punishments" linking crime, punishment and public awareness of the justice system went into oblivion(Foucault, M. 1995/1975, p.113). At the turn to 18th century, the old sovereign model of corporal violence, two models aiming at reforming re-integrating the convicted criminal were competing. One was model using what Foucault calls a "semio-technique" (Foucault, M. 1995/1975, p.94) aiming at reforming the criminal and the public through a rather specific taxonomy of public non-corporal punishment. The other was the prison model, which according to Foucault was aiming at changing the criminal's soul by enclosing him and subjecting him to a thorough discipline. Eventually the prison model established itself (Foucault, M. 1995/1975, pp. 73-134).

Foucault's answer is that prisons reproduce a form of power that has been established already in other sections of society, in particularly the hospital and the educational institutions and the military: disciplinary power (Foucault, M. 1995/1975, pp. 138-139). A power that aims to produce docile and productive bodies and minds, being productive both individually and collectively and internalizing the norms of society (Fink-Eitel, H., 1997, pp. 70-79). Discipline, this, "mechanics of power" (Foucault, M., 1995/1975, p. 138) accesses the bodies not only in order to subjugate them but also in order to make them more productive. Discipline does not only make bodies, that is people subju-

gated to power, do what those holding power over them want them to do, but also to do it the way they want. It increases productivity and subjection in the same process (ibid). In order to achieve these effects disciplinary power is exercised by different methods, technologies and tactics, a "corpus of methods" (Foucault, M. 1995/1975, p. 141), which have different relevance for the subject, and for that reason, they will be discussed in varying depth. The first technology is what Foucault calls the "art of distribution".

This concerns the distribution of people in space and of space, as well as the distribution of individuals, their registration, measurement and ranking. It is the art of controlling the movement of individuals and groups an "anti-desertion, anti-vagabondage, anti-concentration tactic" (Foucault, M. 1995/1975, p. 143). The assignment of functional positions is a part of this process. It aims to create an "analytical space" in which individuals and the flow of goods and information is permanently monitored, assessed and controlled (ibid., p. 143). A very telling example for the kind of control, which could be related to the example of border control, are port hospitals, the kind of place which birthed discipline and pre-figured the creation of economic and regulatory surveillance (ibid., pp. 143-144). Discipline organizes people and objects in patterns that are hierarchical, relational, meaning hierarchical in relation to each other, changing and flexible, a pattern that is surprisingly similar to the way digital technology of scoring works (ibid, pp., 145-149).

The minutiae of evaluative time organization as well as the meticulous training of bodies and bodies in time is another technology of discipline (ibid pp., 149-156). Discipline is also, what Foucault calls the "composition of forces" (ibid., p. ,162) a process of increasing the productivity of bodies, to press order and productivity out of individuals and collectivities, at least from the perspective of those who employ them. It includes the meticulous arrangement of individual movements to bigger coordinated forces linked together via a chain of command which should – at least in theory – range from the factory and army up to the whole country, pacifying and optimizing its productivity in the meantime.

Discipline is very much a political technology based on knowledge with the potential of making the whole of society readable (ibid, pp. ,162-169). [87][88] The techniques of discipline[89] according to Foucault furthermore comprise the "Means of good training", which include the "hierarchical surveillance", "norming sanctions" and "the exam". Of those techniques of discipline, hierarchical surveillance is the most relevant for the subject of this thesis. It is the art of creating circumstances in which those in command are capable of controlling their subordinates and thus enforcing their orders and norms. It was born in the epistemology of Enlightenment area science and, importantly the military camp, from where it influenced architecture for a time to come. It is a technology of power, which creates effects of power turning the old relationship of power and visibility from head to toe. Not those in power provide a spectacle of affluence and power, but the subordinated are made visible in order to catch every transgression of a norm or a shortfall of productivity. It's ideal is a vantage point, where the centre sees everything. Its spirit, in which epistemology, politics and control are interlinked, is beautifully captured in the quote of the Marquis de Vauban proposing a census to Louis XIV, cited elsewhere by J.C. Scott:

"Would it not be great satisfaction to the king to know at designated moment every year the number of his subjects, in total and by region with all the resources, wealth and poverty;[....](Would it not be) a useful and necessary pleasure for him to be able, in his own office, to review in an hour's time the

[87] The closeness to Karl Marx's analysis of productivity is apparent, and acknowledged by Foucault, (ibid, p.163-164). For a comparison see also Marx, K., Korsch, K. (1975/1867), First Book, Section IV Chapter 11, pp.284-298). One of Karl Marx' ideological – genealogical predecessors and ideological foes- Proudhon come to mind as well (Proudhon, P.-J., & McKay, I. 2011/1840, pp.116-117).

[88] One should be aware of the difference between the ideas of 18th Century theorist of governance and the reality on the ground.

[89] Foucault names them as under the header of docile bodies: The art of distributions, the control of activity, the organization of geneses, the composition of forces, under the header of the means of correct training: hierarchical observation, normalizing judgement, examination. Panopticism is its own header (ibid.pp.135-228)

present and past condition of a great realm of which he is the head [...]" (Scott, J.C. 1998, p. 11).

For Foucault, its spirit is embodied in the architecture in the royal mines of Arc-et-Senans, where the centre overviews all things happening in its surroundings, a centralized architecture close to Bentham's panopticon (Foucault, M., 1995/1975, pp. 173-174). However, hierarchical observation in the real world needs "relays" (ibid., p. 174), in order to spread productive discipline throughout society. It must be effective, omnipresent in the productive processes, yet no to heavy handed. Thus, a hierarchical network, which for Foucault is rather a pyramid, of observers, inspectors, controllers, themselves under surveillance, reporting to the top and the centre of their respective institutions, emerges. The pattern is repeated throughout society in the army, factories and schools. Discipline through hierarchical surveillance is a form of power that is networked and based on relations, discreet and self-reproducing, affecting both individuals and collectivities (ibid., pp. 170-177).

The sculpting qualities of disciplinary processes which create society and the individual through the effects of power created by discipline; are also present in the technique of the normalizing judgement and the exam. In the passage on the normalizing judgement, Foucault turns toward the mechanisms of punishment inherent in disciplinary mechanisms. The purpose of this "infra-penality" (ibid., p. 178) which is not only punishing but also rewarding, is to have a normalizing, norming effect (ibid., p. 183). It defines and enforces a spectrum of what is desirable and acceptable and punishes behaviour that falls short of the benchmark. However, it is not comparable to legal systems of justice marking clear legal limits and the punishment of its transgression. Rather it is a relational, hierarchical social relationship, spreading punishment and reward on a continuum of desirable and undesirable acts and states of being. The rise and fall along the hierarchy and reward system itself is the disciplinary mechanism. This mechanism is analysing, quantifying and correcting the individual in order to make it more docile and productive (ibid., pp. 177-183). The exam combines the latter two technologies. According to Foucault it combines ele-

ments of the other technologies of discipline in order to produce, the disciplined subject:

"At the heart of the procedures of discipline, it manifests the subjection those who are perceived as objects and the objectification of those who are subjected" (Foucault, M. 1995/1975, p. 185).

It is the pinnacle of the turning around of the old economy of visibility and power. To be examined, to be made a "case", is not the expression of power; it is a process of subjugation. In addition, it is only possible through the existence of a norm, grounded in the normalizing judgment. The latter in turn needs the hierarchical observation as an epistemological method and practice of power. The relationship between the individual and the population goes both ways. The normalizing analysis of the individual is needed as a benchmark for the constitution of a population, and the individual is crated through the aforementioned process measured in contrast against the generalized abstract norm (ibid., pp. 184-194, p. 190). Foucault argues:

"Finally the examination is at the centre of the procedures that constitute the individual as effect and object of power, as effect and object of knowledge" (ibid, p. 192).

He ends the passage on the exam with a reference to the productivity of power a rejection of the idea of power, as a primarily repressive force (ibid., p. 194, pp. 184-194).The exam and the normalizing judgement later will come up later again in this thesis, in new digital guises.

Panopticism, a term derived from Bentham's infamous design for a disciplinary architectural machinery, is Foucault's analogy and description for a generalized practice of surveillance in in the body of society. He begins his analysis of panopticism with a description of an older mechanism of discipline: the lock down of a city in the grip of the black death. The lock down creates a situation of radical control and immobility. The inhabitants are locked down, their state of health and whereabouts are under constant surveillance and control by the authorities. This does not only serve to contain the disease but also puts the movements and social relations of the inhabitants on hold by force.

Any form of horizontal organization is effectively blocked (ibid, pp. 195-200). In this way, hierarchical control from the top to the bottom is guaranteed. According to Foucault this is not a problematic status quo from the point of view of the authorities. To the contrary, it is rather the blueprint of a utopian vision of a controlled and readable society (ibid, p. 198). Here the panopticon emerges in its role as architectural vision of a controlled society.

Bentham's panopticon was first devised as model prison. However, he considered it a universally applicable tool, wherever a hierarchical centre needs to control a multitude. [90]

The panopticon is an architectural machinery of isolation, surveillance and internalization. At the centre of the panopticon is a watchtower surrounded by holding units. The latter are open towards the tower so that they and the people inside can be put under surveillance from the centre all the time. Crucially the cells are built and arranged in a way that isolates the inmates from each other and prevents any organisation among them. In the meantime, the tower is constructed in a way that it is impossible for those in the holding units to see whether they are under surveillance or not and by whom. Given the constant threat of surveillance and the impossibility of knowing if they are under surveillance or not, people in the holding unit must assume that they are under constant surveillance and that any misdemeanour will be registered and punished. Thus, they start to pre-emptively apply the rules and norms to which they are subjected to. They internalize them. In this way, the discipline of given institution is enforced without further potentially burdensome and costly enforcement mechanisms.

The panopticon dis-embodies and de-personalizes power through surveillance. Who runs it, and who is at what time in the tower is irrelevant for its mechanism. This disembodiment is one of the reasons why Foucault then considers

[90] But also the other way round in the case of the" governmental panopticon",where government officials are sitting in the panopticon and are watched by the governed. Furthermore, the famous prison panoptic on was just one of many usages of the panoptic on Bentham had in mind (Galič, M., Timan, T., & Koops, B.J. 2017, pp.11-15.)

this model of surveillance as a high form of disciplinary technology. The *“Diagram of mechanism of power reduced to its ideal form”* (ibid., p. 205). The panopticon is a form of political technology that can be detached from its specific usage and it can be applied everywhere wherever a multitude of individuals should be disciplined (ibid., p. 205). It is the blue print of surveillance spreading throughout society turning it into a “society of surveillance” (ibid., p. 217).

According to Foucault, the model of the city under lock down is positioned on the one end of the spectrum of discipline and the model of the panopticon on the other. The model of the state of exemption and the model of generalized surveillance are two ends of a spectrum of discipline with the latter being the result of the spread of disciplinary technologies throughout society in the 18th century (ibid., p. 209). He attributes this spread of disciplinary mechanism to a number of processes, which will not be covered in detail here [91]. What needs to be stressed is the importance he attributes to panopticism and surveillance for the spread of disciplinary mechanisms, which as a political technology is not bound to any specific institution. It is exemplified by Foucault’s treatment of policing and surveillance. For him policing is coextensive with the whole of society, while also being concerned with minutiae of society’s life, the infinitesimal details of society and political power (ibid., pp. 213-216). He argues:

“And in order to be exercised this power had to be given the instrument of permanent, exhaustive, omnipresent surveillance, capable of making all visible, as long as it could itself remain invisible” (ibid., p. 214).

Crucially, policing and the emerging network of police surveillance is aiming at the behaviour of individuals and collectivities and not only at big crimes and unrest but at the broad spectrum of “undesirable behaviour” of all kind. Policing is a form of behavioural control. It is function of discipline (ibid., pp. 213-216). Foucault thus defines the police as *“…a state apparatuses,*

[91] These are: The functional inversion of the disciplines, the swarming of disciplinary mechanisms, the state –control of the mechanism of discipline (Foucault, M. 1995/1975, pp. 210-217).

whose major, if not exclusive, function is to assure that discipline over society as a whole (the police)" (ibid, 216). This mechanism of surveillance is crucially also aimed at the individual vis-à-vis the state, which is a part of the centralized power-knowledge nexus that is the self-running machinery of surveillance (ibid., 217). It is qualifying and categorizing and categorizing individuals along a scale of qualities and norms, together with the other disciplinary mechanisms. It has the tendency to single out specific individuals and groups of individuals and to re-adjust them to the norms and here prison as a "reforming" institution comes into play. Panopticism is very much a technology that produces unequal social relationships of power and upholds them (ibid., pp. 218-228). On the stage, there is the play of society of equal *citoyens,* but a political machinery of productive power relationships of inequality is hiding in the engine room of society (ibid, p. 217).

Certain aspects of Foucault's analysis can be adapted to the current situation of digital surveillance. The omnipresence of data emitting digital devices and digital technology into every aspect of life from industrial production to dating apps has created a situation not unlike the situation of the inhabitants of the Benthamite panopticon, albeit not for a singled-out minority but for everyone (Stampfl, N. S., 2013, pp. 62-63). Given the amount of data gathered about pretty much anyone living in an industrial society, and the fact that it is almost impossible for the average customer or traveller to keep track of what data is gathered, combined, sold, re-sold and by whom and for what purpose the metaphor is not too far-fetched. It is a safe assumption that everyone and his digital shadow is under surveillance. Individuals are under surveillance in that sense that there is a growing body of data on everybody, though it is almost impossible to ascertain when this data is actively used, when a person is under active surveillance and by whom. Therefore, it is reasonable to act in a manner that avoids harming oneself by omitting the "wrong kind of data", or at least try not to. Especially as the power –relationship between those organisations gathering the data, and those individuals whose data is gathered is deeply asymmetrical (Stampfl, N. S., 2013, pp. 62-63). More importantly gathering of data can have adverse effect on the individual that is profiled while the individual has little chance to circumvent the gathering of data. In the private sec-

tor big data and surveillance-based business practices have tangible effects for individuals ranging from getting or being denied credit, access to housing or paying higher prices when shopping online (Stampfl, N. S., 2013, p. 39).

For that point, it does not matter what the business model of the data gathering companies is. It can be to sell various data-based services such as the Alphabet subsidiary company Google (Stampfl, N. S., 2013, pp. 26-27). It can be companies whose business model is giving access of their customer bases to other companies for advertising purposes such as Facebook (O'Neill 2016, p. 74). It also can be the credit scoring of customers (Stampfl, N.S., 2013, p. 39). Another example are companies dealing straight with the data such as so-called data brokers (Citron, D. K., Pasquale, F., 2014, p. 122). The mechanisms through which corporations gather and exploit data are often also kept secret and are little understood by the majority of users (Christl, W., Spiekermann, S. ,2016, pp. 10-11). For the individuals and collectivities measured and scored under algorithmic surveillance the metrics and heuristics behind this measuring are largely impenetrable. The panoptic tower of the present day is an algorithmic black box[92]. In addition, there is no way out of this panopticon as it is deeply entrenched into society and everyday life.

Foucault wrote of a *"faceless gaze that transformed the whole social body into a field of perception, thousand eyes posted everywhere"* and was made of police agents, spies, informers and prostitutes (Foucault, M., 1995/1975, p. 214). Today these thousand eyes are millions of devices leaving traces of data and producing data that together allow for a thorough penetration of any population and precise profiling of most individuals (Stampfl, N. S., 2013, p. 14). For individuals the sources of data and data are hard to keep track of and even harder to avoid.

[92] The metaphor of the black box is used here in the sense that the details of the data processing and the link between data gathering, data processing and their effect on the individual are very difficult to decipher. To fully understand in detail each and every act of data gathering and surveillance that happens in an average person's life in an industrial society is practically impossible.

Here is a list of data and sources of data that can be used to identify, profile, track, sort, categorize and predict individuals and groups of people and their status and behaviour. The list does not claim to be complete or exhaustive. The aim is to give an impression of the depth of data that is deeply embedded into everybody's life.

When surfing the net and using apps users can be tracked across, websites and devices and identified inter alia via their IP –addresses, advertising – ID, mac-addresses, search history, tracking by cookies, such as third- party cookies, flash cookies or hard to delete, so-called ever- cookies, browser fingerprints, and the hardware configurations of your computer (M. Schneider et al., 2014, pp. 7-17). The data entered into social networks and data gathered beyond those data entered voluntarily can be used for identification purposes as well. This data is then sold and used by the advertisement industry, by data brokers, insurance companies, employers, banks, scoring companies and even by companies close to governments who are targeting activists. (Stampfl N.S., 2013, pp. 36- 37, Oberbeck, D., 2014, Christl, W., Spiekermann, S. 2014, pp. 94-117). Most commercial websites meticulously register the behaviour of its users. Some social networks create so-called shadow profiles from people not in a given social network but in your contact lists (Stampfl, N. S. 2013, pp. 21-22). Simple smartphone meta-data can be exploited with surprising statistical accuracy (Christl, W., Spiekermann, S. 2014, pp. 16-18). There is data gathered by and through apps some of it of quite sensitive nature, for example the data from health apps (Christl, W., Spiekermann, S. 2014, pp. 46-52). There is smartphone-related GPS data which can be combined with other sets of data (Christl, W., Spiekermann, S. 2014, pp. 29-30). There is finance data and of course credit scoring (Spiekermann, S. 2014, pp. 94-117).

What is important to understand is that most of this mass profiling and scoring is made with aggregated and relational data. In the world of big data, you are a number related to other data that is only relevant as a part of bigger aggregate number which then affects the individual profile. The potential adverse effects on individuals often happen because people find themselves in the "wrong company", that is the wrong kind of sociological or micro-sociological catego-

ry, from the perspective of the algorithm doing the sorting. In the meantime, it is relatively easy for companies specialized in dealing with data and customer profiles to identify individual profiles (Christl, W., Spiekermann, S 2014, pp. 94-117). Disperse data points from different sources, type of data, devices and individuals are gathered and aggregated to individuals' profiles. Those profiles are aggregated and scored to groups and categories and members of those groups and categories are then targeted as groups and individually. As there are several actors and companies involved and the scoring and sorting mechanisms are not known, the process of surveillance of categorisation is opaque to the costumer. While the companies involved have highly specific datasets with often very sensible and powerful information, the customer has little knowledge about the process and hardly any effective means of defence.

The power relation is deeply asymmetrical.

Foucault's spies, observers and informers themselves, are also not gone (Foucault, M. 1995/1975, pp. 214). Besides all the data that is gathered by private/market actors there is a growing amount of data gathered by state actors particularly from the security sector. As the state security sector in particularly police and secret service are accessing the vast repositories of private data and the boundaries of private and public forms of control sometimes are blurred[93]. In gathering data from both private and public sources, secret services still are among of the biggest collectors of data (Greenwald, G. 2014). Also, at the intersection of private and public security, is the increasing spread of biometrical data which is important in both fields. There are biometric data in passports, and visas and the corresponding databases for example the SIS II and the VIS.[94] In the field of public security there is furthermore data created by CCTV systems, data in criminal records and data in police data for which the ECRIS, and the future ECRIS-TCN and the Europol and Interpol databases are examples relevant for this thesis. There is border crossing data, such as

[93] For example: Acxiom, one of the world's biggest data brokers, actively cooperates with the FBI (Christl, W., Spiekermann, S., pp. 94-95).
[94] Chapter 5 will expand on the issue of biometrics in border surveillance.

from the future entry-exit system[95]. There are satellite systems of surveillance, such as the satellite and technical tracking systems tracking means of transport and goods. Eurosur is an example for a surveillance system that uses satellite surveillance data and vessel tracking data for border surveillance purposes. Besides the field of border surveillance police forces increasingly rely on surveillance and intelligence and conflicts about the extension of police surveillance power, breaking and circumventing encryption and even hacking by the police abound in the politics of surveillance and privacy (Mühlenmeier, L. , 2017).

The list of types of data, data sources and policy fields concerning issues of privacy and data protection is very much incomplete and could be continued, ordered and refined almost ad infinitum.

All these agents and technologies together make an up a dense socio- technical network. Foucault was right in relentlessly stressing the power-knowledge nexus. Knowledge, especially when asymmetrical “knowledge over x” tends to strengthen already existing power hierarchical power relationship. Modern algorithmic surveillance is no exception. In addition, given the necessary financial means and technical skills the socio-technological network of power is a resource that can be taped into and increase the power of a given actor through knowledge. It becomes a tool for a given actor, much as if a bot- net becomes a tool for a cyber-criminal. Existing networks of power can increase their power by tapping into this mass and data and use surveillance for their purpose. The political network (the state) has even created institutionalized form for the gathering of knowledge in order to protect and further its interests and increase its power whether internally or vis-à-vis its competitors: Secret services. Thus, it is unsurprising that secret services are among the most aggressive actors in the field of gathering data through surveillance, a fact that came once again into the public focus through the revelation of Edward Snowden.[96]. The latter is a reminder that, even in democratic states bound by

[95] These databases will be explained in chapter 4.
[96] For a good introduction into that specific topic see Greenwald, G.2014

the rule of law can develop a machinery of surveillance that can pose a danger to civil liberty, in particular as there is always the possibility that this apparatus of surveillance can fall into the wrong Hands, should democracy and the rule of law falter (Grunwald, A., 2019, pp. 186-187).

The role of the police forces, also a part of the political network, although as an executive agency, was already discussed above.

In as far as data driven business models can be considered surveillance-based, it is not far-fetched to argue that these business models gave rise to some fairly powerful actors in the economic network. Furthermore, algorithmic, big data based, surveillance increases existing inequalities and strengthen existing power relations as well.[97] They do so in a fashion that is surprisingly reminiscent of the technologies described by Foucault. Foucault describes how characterizing individuals and the control of a diverse multitude is the basis of this "microphysics of what might be called a 'cellular' power" (Foucault, M. , 1995/1975, p. 149). He speaks of the schemes to create taxonomies, tableaux, classes and ranks for example of pupils (ibid., pp. 145-149). Discipline is also the attempt to create classes, hierarchies, serialized systems of categories in order to make humans manageable. This precisely is what many big data-based technologies, including surveillance technologies, are attempting to do. Foucault describes how the classifying and ranking of people and the rise and fall in the classes and ranks does not only constitute an epistemic practice of knowledge and control, but is also the incentive and the punishment- the disciplinary mechanism itself. A similar, not identical, mechanism is at play in many big data-based surveillance mechanisms. The array of panoptic technologies more often than not has the goal to gather data, sort, classify and arrange people into categories, ranks and hierarchies based on mathematical models. Those in turn are related to a specific purpose which may differ widely. This purpose can be to calculate the recidivism (return rate) of customers of a website or predict the recidivism of prison inmates (O'Neill, C., 2016, pp. 84-

[97] To clarify: not all forms of surveillance are big data driven and not all forms of big data, even when using data of people can be classified as surveillance.

105). It can be to score the quality of universities or of teachers (ibid., pp. 3-11, p.50-68). It can mean the probabilistic exercise of finding potential criminals via predictive policing (ibid, 100-105). It can also mean designating potential and /or real terrorists in the Pakistani borderlands via a scoring algorithm. That means rating their probability of actually being a terrorist, based on their cell phone meta-data and then killing them with drone strikes (Naughton, N., 2016). It can be the classical credit score or a credit score based on all available data on a given person, from government files to web searches. It also can be the credit- score used to check the employability of a job applicant (O'Neill, C., 2016, pp. 105-122). In many cases the rise and fall in the score is the gain and or punishment mechanism as it has very real effects on those scored and ranked: being targeted for predatory educational or lending schemes, worse credit or unemployment (O'Neill, C., 2016, pp. 50-68,68-81,105-1022). The combination of economic scoring and surveillance can be outright discriminatory for example for minorities (Grunwald, A. 2019, p. 186). Surveillance is what feeds these algorithms. The ongoing data gathering feeds the ranking, categorizing and scoring. The results in turn affect the life of those on the receiving end of the model/score/category, as decreasing their standing in the score thus creating a nefarious feedback loop.

Quite often, these feedback loops hit the already disadvantaged the hardest. This is adding an element of class to the process. When corporations, whose owners and CEOs belong to the already powerful classes, or the state elites apply "Weapons of math destruction", while those suffering most through it often belong to disadvantaged classes, the process strengthens existing power structures described by power structure research and G. W. Domhoff, with fintech companies being a good example (O'Neill 2016, p. 12, pp. 155-160).

To summarize: Usually applied by people and institutional actors with a lot of power in existing power structure mathematical models are created that already necessarily imply the policy desires of the actors employing them in their design, as models after all are "Opinions embedded in mathematics" (O'Neill, C, 2016, p. 21). The desire to apply one's order and achieve it, whether by states or entrepreneurs, is similar among actors, and reminds of

analogous desires described by Foucault, differences notwithstanding. These algorithms are then applied to the real world, creating effects based on their models affecting and re-ordering -or destroying- the lives of citizens and customers, who are ranked, scored and categorized in a quite disciplinary fashion. In the process, they rely on data, often gained from surveillance, and strengthen existing power relations. While the process is technically mediated it is a process that is not identical but comparable to the hierarchical surveillance Foucault describes. For the average customer and citizen, the mechanism that increasingly decide on his fate are opaque as the tower in the panopticon. He knows he is under surveillance, that data is gathered on him. He is becoming a number in a sea of numbers related to even more numbers. These deeply non-personal, technologically mediated power relations can have a profound effect on his life, while often revealing his most intimate information. How these mechanism work, what data is exactly gathered by whom, how he is exactly profiled and categorized, and how the judging algorithms work is hidden behind state and trade secrets, code, mathematics and the dispersion of actors. He is caught in the digital panopticon and trapped in the power relations it supports and creates and there is little he can do about it.

Sometimes all these aspect come together in one system, as in Chinas several plans and experiments for a “social credit system” which combines power relations based on the merging of state and big data capitalist actors, scoring, intrusive and repressive mass surveillance, and in this case it creates a very much intended panoptic effect (Böschen,S. Huber, G., König, R., 2016, pp. 71-72).

Foucault’s analysis is a description of surveillance as *political technology*, which is still useful today although the *actual technology,* the artefacts and what can be done with, them has radically progressed and altered. Foucault has not described the power structure itself in the sense of Domhoff and Mann, although technology and power structure are related with one another. The text will come back to the relationship between power structure and technology further below.

3.3 Chapter Conclusion

3.3.1 The European border regime as a panoptic power structure

Although there are clearly limits to the applicability of the theories to the case at hand, such an adaption of Foucault's theorization of surveillance is useful in shedding light on the character or the European border regime.

The European border regime is not that much a classical disciplinarian regime concerned with creating docile bodies, and "correctly trained", productive individuals or collectivities. Attracting the "right kind of migrant" and sorting out the "wrong ones", however, is one of its main purposes, with the focus on the latter. Nevertheless, the questions of behavioural control of people is not its concern, and all such tasks are relegated to the member states, their social, educational systems, and their economy according to their needs. Still that does not mean that it is not a thorough system of surveillance and surveillance as a form of discipline. The surveillance regime is designed accordingly.[98]

The European border regimes task is to let certain people and goods in and prevent others from entering, and control them once they enter. This mechanism as such is nothing new. Foucault was spot on in describing borders as one of the historical sources of discipline and surveillance. He describes ports as hotbeds of illegal activity and ports and (naval hospitals) as *"...a filter, a mechanism that pins down and partitions; it must provide a hold over this whole mobile, swarming mass by dissipating the confusion of illegality and evil" (*Foucault, M. 1995/1975, p. 144). The description of the function of naval hospital of Rochefort he gives, the control of goods, economies, people and identities could be analogously transferred to modern border control and

[98] One might argue that the lack of productive disciplinary characteristics of power, discipline and surveillance that were so important to Foucault would speak against using his work in the first place, however, his work on surveillance is rich enough to be applicable even though it might mean using his theories somewhat across the grain.

even to such concepts as Integrated Border Management with its concern of holistic control of goods, people and risks. The form of surveillance and control applied on the border, and in particular, the treatment of refugees is reminiscent to the form of control described by Foucault when dealing with a city in the grip of the black death and the treatment of beggars and lepers in the 19th Century (Foucault, M. 1995/1975, pp. 195-200). It is about defining people and groups of people as risks, preventing them entering uncontrolled in a given territory, filtering them out controlling their movement, if necessary, keeping them in designated places such as refugee camps and asylum seekers homes and under control as long until they get removed or declared legitimate. Crucially this treatment is limited to some people, not all people crossing the borders. As the technologies that will be described in chapter 4 will show it is one crucial aspect of the border regime to filter and identify people according to categories. When engaging in this filtering exercise and using surveillance technology to do so similar technological processes as those described above are often at play, which in turn resemble the political technologies Foucault describes.

Related to that the European border regime is to significant degree not only concerned with the control of individuals but with the control of collectivities and populations. Its character as a membrane to a political space also implies that its very aim is to control the influx of certain groups and populations.

Foucault works are somehow used across the grain here as *Discipline and Punish* is more focused on the "microphysics of power" and the access to the individual body, while *The history of Sexuality: The Will to Knowledge* is considered the work of Foucault which turns towards collectivities (Fink-Eitel, H., 1997, p. 8, pp. 63-95, pp. 86-87). However, the former works focuses on surveillance, and the latter works focuses on Sexuality, which is not the subject here, therefore such a choice is palatable.

Back to the European border regime. Of course, the surveillance regime also has to deal with individuals. This is in particular true with regards to refugees,

as the right to asylum and to protection is still constructed on the basis on individual rights in national and international law (Meili, S. 2018, p. 389)[99].

The border regime still needs to examine each individual case on its merits. Thus, the examination that Foucault considers such a crucial element of discipline is also still present in the border regime. Although it does not create the individual but the political figure of the refugee. Also, when assessing the right of entry of other travellers, the process of examination is still required, however, fleeting.

There is an inherent tension in the tasks of the border surveillance system that has to control multitudes while still examining individual cases. Here big data technologies come in. Big data and digital technologies in general are extremely helpful in fulfilling both tasks. They make gathering, if needed, very detailed data and profiles and combining them as needed much easier. Whether they help bring classical surveillance on a next level (such as Eurosur), increase the power of identity registers via digital data base such as the SIS II or apply scoring and with it risk assessment on a mass base with tools such as the PNR databases or the ETIAS database, applying them makes sense from the point of view of those employing them. And in order to do its tasks it makes sense for the border surveillance system to combine data. It makes sense to combine the different data -bases to an interoperable system to clarify identities. It makes sense to include biometric data and use algorithms assessing risks. The extension of the European border surveillance follows a certain functional logic that will be explored in full in the next chapters. The side effect, however, is that it also means a growth in surveillance systems. The more data is gathered, the more systems are created and interconnected the more decisions are shifted into the system the more it acquires the characteristics of a digital panopticon. Surveillance is omnipresent and for those subjected to it, it becomes increasingly difficult to reconstruct what data is gathered, who has access to it and what are the consequences.

99 For example, in 1951 Refugee Convention, article 18 of the European Charter of Fundamental Rights and article 16a of the German Basic Law.

Furthermore, the digital society and its assorted private data is a panoptic ecosystem that the European border surveillance system increasingly falls back on. This includes for example accessing the content of refugees' smart phones, accessing credit- card data for PNR-Data collection or investigating traffickers' networks on social media (Reuter, M. 2017, Rodrian, H.W., 2018, Monroy, M.) This interconnection between the border surveillance system and the general digital ecosystem increases the panoptic effect. Thus, in the emergent European border surveillance regime there are several of the described processes at play as well.

Along with using big data and surveillance technology goes an epistemological exertion of power through modelling, the increase of existing power relations through data gathering, hierarchical surveillance, the normalizing judgment, the exam and an indirect panopticism is exercised in the European border data base surveillance regime.

Still the panoptic effect has its limits. While being a massive system of data retention the European border Surveillance systems is not an absolute behemoth of digital, big data- based surveillance. Not all systems are digital (aerial surveillance is still crucial for example) and not all systems can be classified as big data systems.

Concerning the question if the realization of an internalization effect or a deterrent effect was intended when designing the system, there is nothing in the documents analysed for this thesis pointing towards intending such an effect, therefore this aspect of panopticism is apparently absent at least concerning policy-making. What can be attested that there is very little of an internalization effect present. The Systems of European border surveillance are not very well and known among the European population (European Commission, 2018, pp. 5-7 p. 7). They also are not well known among refugees (Interview with FE). Therefore, an internalization effect is apparently in practice absent as well. For that reason, one should only speak of an indirect panoptic power exerted through the European border surveillance system. This aspect will be expanded in chapter 5.

The form of power created through surveillance is epistemological and embodied. Its logic and mechanisms are older than digital surveillance and were aptly described by Foucault. It can be reasoned that, with some caveats, the mechanism he describes are at play in the digital world as well. In the meantime, they serve as enhancers for existing power structures.

The European surveillance border regime can be characterized as a yet incomplete, partially -big- data driven, partial- algorithmic, partially but increasingly digital, not- always -functioning --as planned, mostly data -base based, panoptic power structure in the making. This characterization does come from its disciplinarian characteristics and characteristics the technology used, however, its character is not only determined by the technology. It needs to be contextualized in the bigger framework, and that will be done in the following section.

3.3.2 Competing networks of power in the European border surveillance power structure

In the following, the unified framework will be applied to the case of the European border regime considered as a power structure. Analytically the European order regime is treated as a power structure, and the European border surveillance as a panoptic power structure. Meanwhile, for practical purposes these two are not separate entities which needs to be theoretically reflected as well.

Firstly, the networks of power, which are acting in the field of Justice, Home Affairs, are in principle the same as the other fields of European Union policy-making. Justice and Home Affairs still takes place in the same polity with the same structure of power that is the European Union. For practical purposes, only the JHA field will be discussed. Of course, there are different actor constellations at work in the JHA field, than for example in European agricultural policy. That means that the interplay of the four power networks is different than in other policy domains, though not radically so, with consequences both for policy-making and policy content.

When talking about power structures this thesis takes the whole of the decision-making structure into perspective. It concerns long term entrenched power structures, policy-making / decision-making structures and the technology itself.

Based on the existing EU structure and the common framework of Michael Mann and G. W. Domhoff, the following can be argued.

Mann himself says very little about the European Union. He assesses the European Union as a “two level state”, which in the meantime has not significantly weakened the power of the member states. He furthermore characterizes it as more of a regulating state than a redistributive state, acknowledges the expanding competence of the CJEU, emphasizes the persistence of national identities and considers it a sui generis case which is unlikely to find suitors (Mann, M. ,2013, pp. 419-420). He also considers the EU as a polity designed to move at the speed of its slowest member (Mann, M. 2013, pp. 419-420). And he argues that the “European Union is a more complex political form, embodying both European wide political institutions and autonomous nation-states. But it is ultimately driven by the interests of the most powerful states” (Mann, M. 2013, p. 10). His assessment of the European Union as a state is debatable, at least a fully sovereign state in the contemporary sense. Legally speaking it is not a state and many crucial state functions are retained on the national level. However, given his open definition of states it still qualifies as a state in his framework.[100] Some aspects of the statehood of the EU are debatable, but this is a moot argument, as the EU is the very political network of

[100] “A state is a differentiated set of institutions and personnel, embodying centrality in the sense that political relations radiate outward to cover territorially demarcated area, over which it claims a monopoly of binding and permanent rule-making, backed up by physical violence” , a definition he , as he admits derived from Max Weber (Mann ,1986/2012, p.37).

power that concerns us here.[101] Still that does reveal much about the internal balance of the European Union, Mann's framework needs to be adapted the case. His assessment of the EU as two-level state, as well as the Characterization of the EU as a regulatory state is correct, as is the assessment of the dominance of the strongest states (Mann, M,. 2013, p. 10, pp. 419-420). Mann does not mention it explicitly; however, it should be added that the EU is a consensus-oriented polity and its decision-making mechanisms are designed this way. This is particularly true in all fields of security policy where member states are reluctant to give up sovereignty and responsibility.

Beside the question whether the EU is a state or not, the two-level character has a number of ramifications. The European Union is not a nation state, but a supranational entity. Political histories, political cultures, class composition and economies, voting rights, constitutional set ups and party systems differ vastly among the 28 member-states of the European Union. Thus, a researcher dealing with power in the European Union is not dealing with the power structure of one society but of 28, which interact in and with the sui generis case of a supranational power centre that is the European Union.

It also has the effect that there are broadly two overall networks of power at play which intermingle cooperate and compete. The first are the 28 member States, and the second are the European Institutions. The balance of power, as well as the power struggles between these two levels but also among the member states themselves, are a continuous source of conflict in EU politics. The EU has a dual character, as it has a very active legislative centre, which regulates a significant amount of public life, but the other power networks continuously counteract it. The EU Commission has the right to initiative, while the EP has an extensive co-legislative power and effective veto powers

[101] One example is the ever lasting, protracted legal conflict about the supremacy of EU law over national constitutions (Craig, P. P., De Búrca, G 2015, pp.266-315). One could also argue in how far EU law as EU law is backed up by physical violence if the means of violence are almost exclusively in the Hands of the Member States. The debate on the character and teleology of the Union will probably continue for a long time and this is not the place to deal with it in detail.

in most policy areas.[102] However, it lacks the right to initiate legislation and shares budgetary powers with the Council[103]. Through the doctrine of direct effect and supremacy EU European law and the CJEU have a centralizing and homogenising force which can hardly be underestimated (Craig, P. P. , De Búrca, G. 2015, pp. 184-224, 267-315, Mann, M. 2013, p. 419). With the treaties the EU has its own de-facto constitution and a massive body of secondary law- the *Acquis Communautaire*. EU bureaucracy is a formidable force of redistributive infrastructural power, especially given its relatively small size-the Commission's bureaucracy for example consisted of 24 000 permanent employees in in 2010 -and the scope and relevance of its tasks (Craig, P. P. & De Búrca, G. 2015, pp. 34-35). Overall, it can be argued that the amount of central power possessed by the EU and its supranational institutions is formidable. In the meantime, the centralizing qualities of the EU are offset through the strong power, here analysed *as part of the EU structures*, of the member states. The EU commission is nominated by the member States via the European Council[104]. The Member states also appoint of the judges of the CJEU[105] Law-making is still the common derogative of the Council and the EP and involves a strong role of the Commission (Craig, P. P., De Búrca, G. 2015, pp. 124-137).). The European Council is still a crucial factor in the European decision-making structure particularly concerning institutional changes and politically sensitive issues (Craig, P. P., De Búrca, G. 2015, pp. 46-48). Intergovernmental unanimity-based decision-making also still exists as modus of decision-making (Craig, P. P., De Búrca, G., 2015, pp. 133-137). In addition, there is an accentuated consensus oriented decision-making culture, constrain-

[102] The institutional set up is found in the Articles 13-19, TEU, and 223-309 TFEU, the article ruling the most important voting procedure the ordinary legislative procedure is ruled by Article 294 TFEU

[103] The financial provisions including the rules on the budgetary power can be found in the articles 310-325 TFEU.

[104] Only the President of the Commission is elected by the EP *after* being proposed by the European Council, the body of Commissioners needs to survive a vote of approval by the EP (Articles 14 (1) and 17 (7) TEU).

[105] Article 253 TFEU

ing the use of power play and favouring a consensus even where qualified majority voting applies (Craig, P. P., De Búrca, G. 2015, pp. 133-137).

There is therefore virtually hardly any area of EU policy in which the member states are not involved in the decision-making process and either indirectly or have veto powers. This is not to say that the supranational network of power has no autonomy vis-à-vis the member states network of power. The CJEU certainly enjoys a strong autonomy, and the Commission in its role of the Guardian of the treaty has some significant legal enforcement mechanisms with the court being the ultimate arbiter (Craig, P. P., De Búrca, G. 2015, p.36, pp. 429-463). The European Parliament has become an assertive political actor of its own (Craig, P. P., De Búrca, G. 2015, pp. 50-57).

However, overall the autonomy of the supranational network of power vis-à-vis the national / member state network of power is limited.[106]

The relationship is somewhat mirrored on the ideological level, if the adherence to the European Union is considered as an ideological network of power and the adherence to the national state as a different one. Actually, adherence to both institutions is not mutually exclusive, and is shared by the majority of European citizens. Still European federalism is a minority opinion (Coppola., F. , 2017).[107]

The situation is even clearer in the case of the military network, which is clearly in the hand of the member states. Despite of the Existence of the CFSP the EU simply has no troops of its own. Military power is still the power of the national state[108].

The case of the economic network is more complicated. On the one hand is the EU as an institution mostly financed by the member states and thus dependent

[106] On the Role of the Institutions, the issue of supremacy and decision-making powers and legislative powers see for example Craig, P., De Búrca, G. (2015), pp.30-72, pp. 105-160, pp.266-314).
[107] The support of a unified European State.
[108] Multinational units such as the Eurocorps are not EU troops.

on them. Its own resources are not on par with that of the member states (Nugent, N., 2006, p.430-431). Spending power also still lies with the member states (Mann, M. ,2013, p.419). It can also be argued that the basis of the European economy is still the national member states economies, in that sense that the economy of the EU is an aggregate of national economic networks, markets and governments. On the other hand, economic integration is the core of the EU project. It started as an economic project and core achievements of the EU such as the single internal market, or the Schengen area are related to economic aspects. Economic life is the area where the EU and its member states speaks with the most unified voice, for example in most international trade negotiations a field in which the EU has exclusive competences (Craig, P. P., De Búrca, G. 2015, pp. 327-333)[109]. Economic policy contains those policy fields is in which the EU and its supranational institutions are most involved and the most regulatory competences for example Agriculture, market regulation of monetary policy in the Eurozone (Nugent, N, 2006,.p.388).[110] Other EU member states are still the most important trading partners for most EU States (European Union, 2019).The EU is so beneficial for the development of the collective power of the member states, and integration so deep by now that dissolving the Union would probably spell economic disaster (Koch, C., 2018). This also means in practice, that without a massive change of the treaties the basic institutional and legal setup concerning EU policy will not change. This seriously limits the room for manoeuvre in economic policy.

Overall, the member states are still in control, at least as a collective, however, there is very strong interdependence between the two levels. What should be emphasized is the centrality of economic power for the EU as a polity.

There is another form of power out of Mann's terminology, which is like to used here: infrastructural power (Mann, M., 2012, p.13). It can be argued that the EU and its supranational power network has relatively little infrastructural

[109] Article 3 (e) TFEU.

[110] N.B.: the term economic is used here in the broad sense of Mann circuit of praxis, which includes inter alia Agricultural policy and Cohesion Policy.

power vis-à-vis its population. When implementing its law and policies it mostly relies on the bureaucracies, police forces and courts of the member states[111]. Here again the national member states power networks are indirectly in control. This thesis will come back onto the issue of infrastructural power and implementation.

What emerges from this short sketch is an EU, which is strongly determined by a contrast between two competing networks of power (the member states and the supranational institutions) which are still bound by a common institutional set up, which expresses this conflict, as it would be expected in Mann's framework of institutional materialism. Both networks cooperate with another in this common institutional set up. In terms of military, ideological and infrastructural forms of political power, the national state network holds more power. In terms of economic power and some forms of political power, economic regulation, common jurisdiction and collective power through cooperation, the balance is more even. Here both networks depend on each other; the national state network has created the supranational network and is now well advised to keep it. There are significant power imbalances among the member states, also vis-à-vis the supranational network. Overall economic power, which gives the strongest role for the supranational network is the most important form of power in the polity of the EU.

Actually, this is not very surprising. Mann argues that:

"Economic power [...] is distinctively stable yet cumulative, enduringly embedded in everyday life, generating mass behaviour of a relatively steady, cumulative form. It does know boundaries, but only those of the logistics of production and trade, which are often very extensive, especially today. Economic power relations today, and probably in most societies, form the deepest- and

[111] Europol, for example has no direct executive competences, Frontex border protection personnel is sent by the member states and operates in a mixed legal framework combining EU law and national law, also the Commission has to rely on the member states bureaucracies when implementing EU law. (Europol 2019, Mrozek, A. 2017, pp.84-95 Craig, P. P., De Búrca, G. 2015, p.37)

broadest-rooted power structures, inducing gradual but major change, in modern times adding economic growth over long periods of time" (Mann, M., 2013, p. 428).

This should be kept in mind when turning towards Domhoff's variant of class theory.

As G. W. Domhoff's work focuses on the USA and its power structures, his assumptions have to be transferred to the case of the EU.

Given the importance of economic policy in the EU, and its important regulatory functions a perceptible influence the economic network, trying to influence EU policy through what Domhoff calls the "special interest process" (Domhoff, G.W., 2014, p.164, pp. 164-168) would be expected, also in the EU. Assuming, that without negating the crucial differences, that his basic description of power structures in capitalist societies are transferable, a strong commitment by powerful economic stakeholders such corporations and strong presence of economic elites in EU policy can be legitimately hypothesised.

Despite a certain trend towards internationalisation, European economic elites are still mostly economically and culturally based in their respective member states (Hartmann, M., 2007, pp. 204.-2013). Generally speaking, economic and political elites are more nationally oriented than it is often assumed (Hartmann, M., 2018, pp. 90-97). Thus, it can be argued that economic elites on the on the European level still lack the degree of cohesiveness the corporate class in the US possesses. Furthermore, as Domhoff has argued, were and still are the political and ideological networks in Europe much stronger and forced the economic network to make compromises in the class conflict in the 19th and 20th century. (Domhoff G.W., 2014, p.196). Thus, corporate players in most European states and on the European level do not have the same room for manoeuvre that they have in the US. Meanwhile, legislation on social policy is still mostly in the domain of the member states (Nugent, N. , 2006, p.430). This leads to what is called a trapping effect, keeping unions and civil society organizations which focused on social "bread and butter" issues focused on the national arena and by and large prevents them from organizing

on a European scale. Thus, one of the most important counterweights against the power of capital is, while not precisely absent significantly weaker than in many European Union member states. The lack of a genuine European demos also stands in the way of a genuine European civil society. Therefore, besides Mann's segments and sections dividing the adversaries of the economic elites there are also very powerful national states and identities caging them (Mann, M., 2012, p.11). On the other hand, following the general argumentation of Mann and Domhoff, the power of economic elites and their organizations, corporations, their business leaders and their interest groups, derives from their organizations and positions itself. There is no need to mobilize a constituency or rank and file membership focusing on national issues for complicated European policy issues.

Furthermore, organizing a special interest process and lobbying across national divides is significantly easier for the economic elites. These barriers do not pose a problem for the professional interest group and lobbyist and there is a wide spectrum of lobbyist focusing on the EU mostly working for business interests (Brauns, B., 2019).

Therefore, it can be assumed that there is a significant power difference between the economic elites and their organizations on the one hand and their economic and political opponents on the other.

I would thus argue that there is certain dominance of economic power relations and the economic elite in EU Politics.

So, how do the power relations in the overall EU analysed in the segment above translate into the JHA field and the topic of border control through technological surveillance?

Firstly, border protection and surveillance are also a business. It is a field where money can be made. Therefore, a presence of economic interest and no broad exception from the dominance of economic power relations in the EU is to be expected. In the meantime, border protection (as well as most other tasks in the field of Justice and Home Affairs) belong to a core task of the state. Thus, the role of the political network in the field can reasonably be expected

to be stronger than in other fields of EU policy. Surveillance technologies are quite often built by companies in the defence sector, and as chapter 5 will show this is also the case in the EU (Akkerman, M., 2016a, pp. 1-2). Given the fact that states, their military, their non-military and security agencies and their international organizations are the main customers for weapon systems, whether as exporters or importers, a strong interconnection between actors of the European and national political networks of power, its executive security agencies and the military network of power could be expected as in the field of European border protection well, and as will be shown in chapter 5 is indeed the case (Smith, D., 2018, pp. 6-9, Akkerman, M. 2016a, pp. 1-2).[112]

Justice and Home Affairs policy in the EU has its own set of lobbyists, policy formulation fora and policy initiating mechanisms. It is on the one hand rooted in the security apparatus and the emerging security apparatus of the EU, and in the other in the defence industry and, surprisingly, in the research sector. This field has been investigated by number of reports (Akkerman, M., 2016a, Akkerman, M., 2016b, Hayes, B., 2006, Hayes, B., 2009)[113]. The picture that emerges, which will be analysed in chapter 5, in this particular field of EU policy, which extends to the issue of surveillance technology in border control, does indeed resemble the "special interest process" described by Domhoff, with national governments, intergovernmental and supranational EU institutions, national and European security agencies, the defence and surveillance industry and some research centres in close interplay (Domhoff 2014, pp. 164-168, Akkerman, M., 2016a, Akkerman, M., 2016b, Hayes, B., 2006, Hayes, B. 2009). It can be argued that this is as well partly rooted in the intergovernmental and – especially in the early years – informal character of the field, which gave national states a bigger role in JHA policy than in other areas of EU policy, as has been described in chapter 2. This intergovernmental and informal

[112] States are of course not the only customers of the arms industry, still they are crucial customers if it comes to heavy and complex arms systems.

[113] The relevant sources are cited as a whole on this page, as the whole of these reports deal with the different aspects of the interconnections between the arms industry/the surveillance industry and the politics of border protection and surveillance.

character was step by step reduced until the Lisbon Treaty normalized the institutional and legal setup.

However, one should be careful by asserting too much dominance too this network(s) of power, despite the increase in surveillance policies on both the national and European level, as the European Parliament is not always complacent to their initiatives, there is small but effective civil society network working on these issues (containing such NGOs as Statewatch, or European Digital Rights). More importantly, the European court of Justice emerged as major player in the field of Justice and Home Affairs and civil liberties, pulling the brake on surveillance policies more than once. This set of actors will also be described in chapter 5.

Proponents of surveillance might be winning more often than loosing, but it is not an automatic walk through.

Besides the world of lobbying and interest groups, one should not forget that the European population is still a relevant factor of power in EU politics as well. While the relatively specialist issues of the border surveillance systems and the related systems might not be widely known among the general public, the issues of immigration, borders and border surveillance are connected with each other and are topics of great importance for the public in many member states (Bricker, D., Ibbitson, J. 2019, pp. 67-69). Both, proponents and opponents of increased border protection and border surveillance still have to take these sentiments into account when arguing for their respective viewpoints.

Still the role of surveillance technology in the power structure needs to be explained.

In Mann’s spatial, infrastructural approach, technology is not independent from power structures but intimately connected. Technology and infrastructure form a crucial basis of power. Claims of power and authority have little significance if they cannot actually be executed because the technological and infrastructural means are not there to do so. One example would be the military domain, where for example the limited reach of ancient armies seriously limited the capabilities of ancient empires to actually project their power inside

their empire, thus also affecting the power of the political network (Mann, M 1986/2012, pp. 137-146).[114] [115]The existence of new forms of technology, in this case mostly digital surveillance technology cannot merely add another tool the toolbox of power. It *can* mean a serious re-adjustment of power balances. It *can* mean a profound change in the qualitative exercise of power, regarding extensibility, intensity or infrastructural reach. One can go one step further and argue that therefore a complex technological Infrastructure of power can be part of the power structure itself. It can be argued that the emergent structure of surveillance at the European borders merits this characterization. Furthermore, as will be explained in chapter 4 and 5 there is a tendency to shift decision-making into digital and algorithmic technology through technologies such as for example the PNR -data databases or the ETIAS, which at least partially make bureaucratic decisions hitherto limited to humans. Also, in that sense technology has become a part of the power / decision-making structure. The technological development is too early to assess if this digitalization and automation of decision-making and thus enacting of power is going to be a long-lasting development and what it will spell out for the development of power structures. Still it might be a genuinely new form of exercising power. What Foucault's description gives us is the form the power rooted in the networks of power takes: the political technology and its effects. His theories do not help us explain its sources. In addition, one should be careful when looking at the details. Different networks of power might use the same type of technology for different purposes and in different ways.

With that in mind, it is argued here that surveillance technology is a form of enhancement of infrastructural power. It helps both, Member States and the Union to actually push through and implement policy in an area of policy in which they are difficult to enforce: the border. Both power networks profit by employing them together. As far as there is a shift of decision-making into

[114] This is just one possible example, there are many more through his work.
[115] Sometimes when discussing technology, a certain minor techno-essentialist, techno-determinist streak is present in his writing, however, this is balanced out by the complexity of his analysis.

technology, the disciplining qualities of the emerging border surveillance regime are fitting for the task for which they are employed.

3.3.3 Hypotheses and guiding questions for the following chapters

From what was said above, the following conclusions and hypotheses can be drawn.

Given the overall dual power structure in the EU (the supranational network and the national member state network), it can be expected that this dualism is also prevalent in EU Justice and Home Affairs.

Furthermore, given the sensitivity of the field for national governments, a strong role for national network vis-à-vis the supranational institutions is to be expected, along with a strong role for the Council and the European Council- and indeed that is the case as chapter 2 has shown. The role of national governments was and is indeed stronger than in other policy fields.

Given the importance of economic power in the European Union, a strong role of the economic power network and of economic elites is to be expected. In this case, the concerned industry is the defence and security industry, which builds the concerning surveillance systems. Its political counterpart are the military and security ministries, departments and agencies of the member states and the union which are the customers of the defence and the security industry. Therefore, a power constellation in which both the specific economic network and the political network interact closely with each other is to be expected and has been indeed described in a number of investigative reports and confirmed by some of my interview partners, although some disagreed and other held different opinions concerning the details (Akkerman, M., 2016a, Akkerman, M. ,2016b, Hayes, B., 2006, Hayes, B., 2009, nterview with FE, Interview with Asc.S, interview with ACPE II, interview with AJ 3,interview with AJ1, interview with AJ2, interview with C.)

Thus, a strong network of power that links up the economic and national and European political networks as well as indirectly the military networks asserts influence in the field and probably pushes for the extension of surveillance. This network is here denominated as the surveillance special interest network. It is also connected with other sectors of the political network and the administration (policing and research).

In the meanwhile, as these networks of power deals and includes with the European level of policy-making, there is a presence and a level of organization towards the EU centres of power in particular the intergovernmental institutions (Council and European Council), and also towards the supranational institutions and a cooperation with them as well. This also regards influencing the European Commission, and influencing the European Parliament (and the parties represented therein). Thus, it is effectively a primary triangle of power and policy-making: Member States, economic -political Network, and the European Union institutions.

In the meantime, it can be argued that there is also an emerging counter-network of power regarding the specific issues that are dealt with here: the politics of surveillance and migration policy. It is mostly rooted in NGOs and interest groups but also in political parties. It is partly national based but primarily organizes rather effectively on the European level. It will be denominated as the civil libertarian network.

Both competing networks of power also have to sway public opinion. National governments as well as the EP, thus two sets of very important decision-makers are still dependent of the populace for being re-elected. In addition, the other European institutions cannot afford to ignore it. This goes only indirectly and to a limited degree for the Commissions and the diverse branches of the European and national bureaucracy. This aspect is more important for the "counter-network" opposing surveillance than for the power network proposing it which has a bigger clout in the European bureaucracy, as will be shown in chapter 5.

The role of surveillance technology goes beyond the role of a mere tool on several levels. It is an enhancer of infrastructural power; it enhances power to implement the policies of the border regime. This means it enhances the infrastructural power of both overall power networks: the member states and the European Union Institutions. This dual interest in the extensions of the surveillance regime is also visible in the design of the surveillance systems and the overall surveillance regime as will be shown in chapter 4.

In the meantime, it is also the attempt to project the disciplinarian and panoptic effect of surveillance technologies on the border space. This is sometimes intended and built in, sometimes an indirect effect connecting with the growing panoptical technological eco -system. The slowly emerging tendency of automatic decision-making in border management is another element where technology goes beyond simply being a tool. All these elements together make surveillance technology an element of the power structure itself.

This increase of infrastructural power leads to a basic convergence of policy interests between the member states and the Union institutions and their agencies, which both have an interest in increasing their respective infrastructural powers, sometimes even together, the massive political conflicts on migration and the border regime notwithstanding. It is a pragmatic convergence of interest as the exact distribution of these powers is the subject of constant political struggle. This obviously also goes along with the interest of the surveillance special interest network. Adding the support that the policies of sealing off the borders and extending border surveillance enjoy among significant parts of the European population, the convergence of all these interests explains the endurance of these policies.

If we recall the principal paradoxes of migration policy from the last chapter, then the promise of border-control through surveillance technology to make migration manageable, at least, becomes even more alluring. A sealed off border, or a functioning filter, or a well steered and controlled migration regime disciplined by surveillance: a digital surveillance regime, depending on the preferences of the policy actors, might not be in sight, but the idea serves as a powerful incentive.

With these assumptions and hypotheses- the supranational vs national power network, the surveillance special interest network versus the civil libertarian network, the role of technology as part of the power structure and the convergence of interests and underlying policy problems as drivers- it is possible to turn towards the technology itself. In doing so, these guiding questions for the following chapters (which are also sub-research questions) emerge:

What is the power structure and its sources of power in the European border regime and the European border surveillance regime?

What is the relation between these two enmeshed power structures?

How is power manifested, produced and reproduced in these two structures in general and in the European border surveillance regime/the potential algorithmic panopticon in particular?

Chapter 4: Digital walls and algorithmic border gates – the European border surveillance system[116]

In the last chapters, the history of the European border regime was described. Power and power structures in the EU, and in the field of Justice and Home Affairs, which is the field in which policy-making regarding the protection of the European takes place, were defined and theorized. The power relations concerning the politics of surveillance technology in the European border regime were also defined and theorized as well. Finally, yet importantly, the nexus of power and surveillance and the form of power that emerges from practices of surveillance was theorized.

The next two chapters form a two-step argument to apply this theory on the case of the EU border surveillance regime. Chapter 4 will look into the border surveillance regime, the technological ensemble of artefacts itself, with the majority of the analytical work being done in chapter 5. While they constitute two separate chapters, they should be seen as two steps in one argument and read accordingly.

In the last chapter the metaphor of a machinery of power relationships produced in the engine room of society was used. This is a metaphor of course, but it is an apt one. The next two chapters are, put this way, an attempt to take

[116] The the term "system" is here used in imitation of the Large Technological System in the sense of Thomas Hughes (Hughes ,T., 1989, pp.51-82). It is not quite a Large Technological System as for example the energy system. However, it is a large-scale network of increasingly interconnected technological artefacts and political and legal elements with a common set of goals. Technically and legally, there is not one system. But for the sake of simplicity and given the trend towards unification and interoperability as well as its overall functional interconnectedness of the different border management systems. Sometimes the European border regime is treated as a whole. Technically, it is neither a meta-system nor a single system in the sense of one database. It forms a technological system in the sense that it forms a set of technological artefacts that are related to another.

a look into this engine room, analysing this machinery of power (power structures and the power of technology), the kind of power it produces and how it is produced on both on the technological as well as the technical level, linking up to the questions posed at the end of chapter 3.

Politics and technology are intimately linked. The field of JHA and home Affairs and the politics of border defence is, as well as the European border surveillance regime a structure of power. It will be analysed in how far his in turn influences the creation of the emergent border surveillance system. In the European border surveillance system politics, law and technology merge. As power structures implement policies through technology, technology becomes political. The surveillance regime is a machinery of power that produces specific forms of power: indirect panoptic power. The technological artefacts and the power they produce are linked to the bigger structure. They are an influence on policies, a tool and a driving belt for policies -at least that is the idea- but also a political battle ground. The mutual influence of these levels of the power structure is not clear cut, a clear dividing line between these different levels of the power structure cannot be drawn. Reality is messy. In the case of this chapter, chapter 4, the metaphor of a machinery of power can be taken literally. Chapter 4 is dedicated to the technological characteristics of the European border surveillance regime. The next chapter, chapter 5, will deal with the power structures initiating it and with the power effects that are created through it. This includes the effects of a number of technological shifts which have occurred in the European border surveillance system.

On the surface the European border surveillance system and the process of its extension seems straightforward. Databases and other tools of surveillance are installed, upgraded, linked up and improved according to their specific instrumental-rational limited purposes. However, hidden in the technical and bureaucratic process of the extension of systems of surveillance is a qualitative shift of the forms of surveillance with consequences that go way beyond mere technical changes. It is a shift from a relatively targeted surveillance of specific sectors of the populace towards a tendency to mass surveillance. It includes the increase of biometric surveillance, the deepening of surveillance by in-

creased interoperability. It is a shift towards predictive and preventive forms of surveillance and control as well as the use of algorithmic backed heuristics in this process along with some forms of algorithmic and automated decision-making. It is driven by the massive increase in processing capacity in the last decades as well as policy. By and large this shift and its effect will be analysed in chapter 5, however, due to the nature of the problem It will be sometimes anticipated elements of the analysis of chapter 5 in this chapter, chapter 4. This is somewhat inevitable as both chapters discuss the very same systems, just from different points of view.

The division of chapters is pragmatic one that separates more descriptive and more theoretical and analytical parts; however, these aspects obviously go together, therefore the division is not a dogmatic one.

Both chapters will draw on the empirical material, the interviews with stakeholders and experts, where appropriate.

4.1 The properties of the European border surveillance system

I will begin this section by an assessment, which is an anticipation of the overall result of this and the next chapter: The European border surveillance regime is a big data mass surveillance system with an increasing tendency to use biometrics, automated decision-making and to apply preventive forms of mass profiling and sorting, using mathematical heuristics doing so. It produces a form of indirect panoptic power.

In the meantime, it is a means of implementing migration policy, increasing infrastructural power and a political battleground in itself.

Two additional qualities are worth to be mentioned here in the beginning, as the reader is going to meet them often in this more descriptive chapter. These qualities are strongly connected to the political set up of the European Union and the justice and home affairs domain and are expressed in the legal and

technical set up. The first one is its ongoing growth. This growth is a long-term process and part of relative long-term policy strategies, as has been shown in chapter 2 by looking at the policy programmes and the history of the overall border regime. The tendency of function creep, the tendency of policy-makers and bureaucrats to extend the usage of any given system beyond the purposes for which it was intended to, is part of this process.[117] The second characteristic imply the power struggles of the two principal networks of power, the member states and the supranational institutions, which are visible in the political and legal set up of the system.[118]

The starting point of the border surveillance regime was the Schengen Information System. It was more than just a technical addendum; it was considered as a crucial pre-condition for the working of the Schengen Area. The aim was to bridge the perceived security gap, maintaining police controls over the movement across borders, internal borders and external borders, despite the abolishment of internal border controls. It was also an important step in data exchange and police cooperation. (Bauman, M., 2014). The Schengen Infor-

[117] When talking of bureaucrats in this context, reference is made to high-level bureaucrats, which influence on policy processes not street level bureaucrats, and there is no intention to delve into discussions of the principal agent problem here.

[118] The primary law bases for policies in the field of JHA are to be found in Chapter V of the TFEU, i.e. Articles 67-88 TFEU. The primary law regarding migration, asylum and border policing are to found in Articles 77-80 TFEU. For the purpose of border control and the construction of border control systems Article 77 TFEU is the central article. The Article stipulates inter alia the development of a common policy "carrying out checks on persons and efficient monitoring of the border" (Art.77 (1) b TFEU) and the gradual introduction of an integrated management system for external borders (art. 77 (1) c TFEU. Worth mentioning, considering the two power network theory from the preceding chapter, is the proviso in Article 77 (3) which requires an deviation from the common legislative procedure if the right of freedom of movement of Union citizens is concerned (enshrined in Article 20 (2) a TFEU) and Article 77 4 TFEU enshrining the solidity of any border of the member states. These two limitations show clearly the limits of competence transfer that member states are willing to grant. Here, it can be argued we could see the two power networks in action and the member states in the last instances in the driver's seat. While not primary law in the strict sense the Schengen Convention and the overall Schengen acquis is still a crucial legal basis for the border surveillance regime for example the establishment and running of the SIS II (and the VIS). The Dublin Convention as central piece of secondary legislation deserves a mentioning as well. Please be aware of the changes of the legal framework during the history of the treaty framework.

mation System was considered a means of maintaining control despite the opening of the borders. The SIS was set up in 1990 and went operational in 1995 and is the oldest system in the border surveillance regime (Dumbrava, C., 2017, p. 10, Parkin, J. 2011, p.4). The SIS, now upgraded to the SIS II, still occupies a central position the European border surveillance system. The Customs Information System[119] and the FIDE[120] systems, which both serve the customs cooperation, also stem from the mid-1990s (Council of the European Union, 1997, Estonian Data Protection Inspectorate, 2019)[121]. The next system that went operational was the Eurodac system[122] which contains information on asylum seekers as well as their fingerprints, in 2003 (Dumbrava, C., 2017, p.14). The Directive requiring member states to retain API-Data[123] was passed in 2004 (Dumbrava C., 2014, p.19). In the same year, the first agreement on Exchanging PNR Data with the US was concluded.[124] The conflict on this particular agreement between the legislative and executive power has been going on ever since. This conflict will be described in chapter 5. This includes an intervention by the CJEU, which led to re-drafting of the Agreement that then took its current form in 2012 to which the EP agreed[125]. In 2007 the Commis-

[119] One can discuss if the CIS and the FIDE belong into this list, as they are based on a different policy field, the customs union. Dumbrava, C. (2017, p.9), for example does not count them among the JHA Databases. Given the cruciality of Customs for border protections and the integration of Customs Services in the overall border regime. Here they are considered as part of the border regime, while not strictly being part of the JHA field.

[120] FIDE stands for Fichier d'Identification des Dossiers d'Enquêtes Douanières/ Customs File Information System

[121] Council Regulation (EC) No 515/97 of 13 March 1997 on mutual assistance between the administrative authorities of the Member States and cooperation between the latter and the Commission to ensure the correct application of the law on customs and agricultural matter, OJ L 82/1

[122] European dactyloscopy database

[123] API = Advanced Passenger Information, this concerns the machine- readable part of passports (including name, date of birth, passport number, citizenship), this data is transmitted in advance by the carriers hence the name.

[124] Agreement between the European Community and the United States of America on the processing and transfer of PNR data by air carriers to the United States Department of Homeland Security, Bureau of Customs and Border Protection, OJ L 183/84

[125] Agreement between the United States of America and the European Union on the use and transfer of passenger name records to the United States Department of Homeland Security, OJ L 215/5

sion made the first proposal for a European PNR data retention (European Parliament and Council of the European Union 2016, preamble)[126]. The Prüm Convention on the cooperation on biometric data for law enforcement purposes was concluded in 2005 and became part of the *Acquis Communautaire* via an two Council Decisions in 2008 (Dumbrava, C., 2017, p. 18).[127] In the same year, the Commission for the first time proposed (communicated) the entry-exit system[128], the not realized Registered Travellers Programme (European Commission, 2019a)[129]. It was followed up by the Visa Information System, holding data on visa holders in 2011, full global roll-out was in 2015, (Dumbrava 2017, p.12). In 2012 the EU and Australia concluded a PNR- data exchange agreement (European Commission, 2019b). In 2013 the successor of the SIS I, the SIS II went operational after considerable delay (Dumbrava 2017, p.10). In 2014 the EU and Canada concluded an agreement on the exchange of PNR data (European Commission, 2019b). In 2016 the EU parliament agreed on the establishment of PNR -database (s), which went operational 2018 (European Parliament and Council of the European Union 2016, Mrohs, L., 2019).[130] A planned renewal of PNR-data exchange agreement between the EU and Canada was spoiled by a landmark CJEU opinion that concluded that the agreement is not compatible with European fundamental rights law in 2017 (CJEU, 2017). The entry-exit system, passed the EP in 2017, so

[126] Like API Data, Passenger Name Record (PNR) data is send beforehand by the carrier but goes beyond API Data and includes data such as means of payment, travel information and booking information. It is also a tool of screening and risk assessment.

[127] It was initially an intergovernmental agreement that was later integrated into the community *acquis*. It is an agreement that regulates the mutual access to biometric data for law enforcement. purposes. There is a communication infrastructure, but no central databases. It is also known under the somewhat misleading designation Schengen III.

[128] Which will register the biometric and non-biometric data of Third Country national entering the European Union.

[129] Which would have pre-screened travelers and would allow some travellers privileged automatized procedures

[130] Council of the European Union & European Parliament (2016). Directive (EU) 2016/ 681 of the European Parliament and of the Council of 27 April 2016, OJ L 119/132 on the use of passenger name record (PNR) data for the prevention, detection, investigation and prosecution of terrorist offences and serious crime.

did the ETIAS[131] in 2018 (Council of the European Union, 2017, 2018). The same year the SIS II was extended to include an automated fingerprint recognition system (AFIS) (Monroy, M., 2018d). As early as in 2016, plans were presented to integrate the most important information systems into one searchable meta-system. It includes the SIS, the VIS, Eurodac, and the planned EES, ETIAS, ECRIS-TCN (the proposed criminal records on third country nationals), it also includes Interpol and Europol databases. Not an EU System but still a crucial piece of the border security architecture is Interpol's stolen and lost travel document database (SLTD) (Monroy, M. 2018a, European Commission, 2017, Dumbrava, C., 2017, pp. 5-25, p.18). Agreement on ECRIS-TCN was reached in 2018 (Monroy, M. 2018 d). The proposal on interoperability passed in 2019 (eu-Lisa, 2019). Eurosur is not a database but a crucial border surveillance system, which went operational in 2013 (Schumann, H., Simantke, E.,2016).

Besides these systems which are covering huge populations and are accessed by a broad range of agencies there are other more specialized systems in the field of JHA whose functions and purpose sometimes blur over into the field of migration control and border control.

Notable in the field of JHA Home Affairs are for example the databases of Europol such as the Europol Information System (EIS), already established in 1995, which became operational in 2005 and was reformed in 2013 (Dumbrava, C., 2017, pp. 16-18). Worth mentioning is also the decentralized ECRIS connecting the national criminal records repositories of the member states for mutual data exchange, which went operational in 2012 (Dumbrava, C., 2017, p.20). Eurojust's case management system, already established in 2002 can be counted among these systems as well (Dumbrava,C., 2017, pp. 21-22).

Neither a database, nor border related, but important for the politics of data protection in the field is the EU US TFTP Treaty -better known under the

[131] The ETIAS will pre- vet travellers before they enter the union.

name SWIFT Treaty (European Commission, 2019 c).[132]The establishment of an EU TFTP System is under discussion., European Commission 2019 c).

While not all law enforcement systems are used for border management purposes, all border management systems are used for laws enforcement purposes (Dumbrava, C., 2017, p.9).

Looking at the technological set up there are some databases, which are centralized, with a central unit, and some which are decentralized, meaning they do not possess a central unit and interlinking decentralized national databases with each other. The SIS, the VIS, the CIS, Eurodac, the Europol Information System, Interpol's SLTD database fall in the centralized category, so will the entry-exit system and ETIAS. The Prüm databases, the API and PNR databases, Eurojust's working file system, and the ECRIS fall into the decentralized category. Like the data of the EU-PNR databases which are run by the member states, the PNR Databases related to the international agreements are run by the respective partner states. This variety shows, so it can be argued, a tendency, to carefully parcel power and competences and it continues in the legal and technical set up of the more centralized Systems themselves (Dumbrava 2017, p. 9, CIS Regulation[133], Articles 29-34, Monroy, M., 2018e).

Consider the Schengen information System II, arguably the most important border protection information system. Its technological and legal setup is also typical for most of the other systems that followed.

This design aligns with a general reluctance by the member states to share sensitive data in the field of security. This was confirmed by my interview partner at Frontex:

[132] TFTP stands for Terrorist Finance Tracking Programme and gives law enforcement wide ranging access to international money transfer data.

[133] Council Regulation (EC) No 515/97 of 13 March 1997, on mutual assistance between the administrative authorities of the Member States and cooperation between the latter and the Commission to ensure the correct application of the law on customs and agricultural matters, OJ L 82/1

"In terms of security policy, the member states are rather cautious about sharing information, which is, of course, in the nature of things." (Interview with FE)

The system consists of a central system (central SIS II), the central SIS II database (CS-SIS) and a uniform national interface (NI-SIS). The latter connects the central unit with the national databases, the respective N.SIS II. The entering, uploading, deleting and searching of data is done via the national databases. States are allowed to copy the data of the SIS II databases for their national purposes, but are not allowed to search the national databases of the other member states (Article 4 SIS II Regulation).[134] Specific national authorities – in Germany, this task is designated to the Federal Criminal Police Office – are responsible for the maintenance of the N.SIS II. In addition to this, there are national offices, so-called SIRENE offices, supplying supplemental information to other participating states if needed (Art.7 , SIS II Regulation). This means that data is hold on both the European and the national level, with the central (European) repository being the central database. The flow of data is mostly directed from the national level to the centre with only a partial horizontal flow of data among the member states.

In can be argued that this technical set up includes, considerable efforts to not interfere with national sovereignty and respect national boundaries. On the one hand, it is a centralized database. On the other hand, the member states authorities and not any supranational authority enter and uploads data. Furthermore, it is significant that there is not any centralized agency on the European level that would have an authority. In fact, there is a common area of free travel, and a common visa policy but no common authority to enforce it. Frontex cannot be counted as such an authority as it is clearly concerned with border protection strictly speaking. This lieu is telling concerning the reluctance of the member states to give up their sovereignty in such a sensitive field. The

[134] Regulation (EC) No 1987/2006 of the European Parliament and of the council of 20 December 2006 on the establishment, operation and use of the second generation Schengen Information System (SIS II), OJ L 381/4

whole setup shows us the degree to which the practical infrastructural power still lies with the member states, even in the case of a technical system aimed at controlling a common border space. This basic technological and legal set up is common to most European border surveillance systems initiated at different times in the European integration process.

The tendency to strengthen the European level in the border regime should not be denied. This is visible in the decision to enlarge Frontex and turn it into the European Border and Coast Guard, the foundation of the EU's large-scale IT-System agency eu-Lisa and in some cases even in the technical design of the more recent proposals for border surveillance systems. In principle border surveillance is still in principle the prerogative of the member states (Mrozek, A. 2017, p.84-96). The persistent reflection in the technical and legal design of the different border surveillance systems, indicates the persistent resistance of member states of giving up too much power to the EU in this sensitive field.

The SIS contains alerts, for example for people that are requested for an arrest or listed for a refusal to entry.[135] It contains data necessary to identify the requested persons or object. Types of data are inter alia name, sex, date of birth or fingerprints or photographs including by now also biometric identifiers (fingerprints and photographs). Alerts can be interlinked; biometric data can be searched via the SIS-AFIS[136], making the SIS II a searchable database, as opposed to the SIS I on which worked on a hit /no hit basis. (Article 20, Article 37 SIS Regulation, Statewatch , 2018).

135 The Categories of Alerts are*:* Third-country nationals banned from entry or stay in the Schengen Area
(Article 24 of Regulation 1987/2006) Persons wanted for arrest – for whom a European Arrest Warrant or Extradition Request has been issued (Article 26 of Decision 2007/533), missing persons (Article 32 of Decision 2007/533) Persons sought to assist with a judicial procedure (Article 34 of Decision 2007/533);Persons regarding whom discreet or specific checks are necessary – for the purposes of prosecuting criminal offences and for the prevention of threats to public or national security (Article 36 of Decision 2007/533);Objects for seizure or use as evidence in criminal procedures, such as vehicles, aircraft, boats, banknotes, firearms (Articles 36 and 38 of Decision 2007/533) (Dumbrava. C., 2017, p.10).

136 AFIS =Automated Fingerprint Identification System

Other Systems have a similar technological setup as the SIS II.

A good example is the Visa Information System (VIS), another very central system in the border surveillance technology landscape. It is also an important biometric database and forms part of the current plans of interoperability. It is a crucial tool in realizing the common visa policy. It contains the data of visa holders and visa applicants concerning visa of citizens of non-visa exempt countries. It contains the ten fingerprints and a biometric facial image of said population as long as they are older than 12 years old and not otherwise exempt (Dumbrava, C., 2017, pp. 12-14). The aim is to make sure that the person crossing the border is also the one applying for the visa in the first place. Checking against the SIS II is also part of the vetting process. Visa authorities as well as asylum authorities have access to it, so do national police agencies and Europol. The VIS is also used for asylum and security purposes (Dumbrava, C., 2017, pp. 12-14). In the context of the still ongoing reform of the Dublin Regulation it is under discussion to make searches mandatory for the member states (Dumbrava, C., 2017, p.14). The retention period is five years. Its function is rather that of a membrane, than a crime-fighting tool even though it has aspect of both attached to its functionality. It is a control tool to ascertain the identities of the people entering the Schengen area and preventing the entrance of undesired people into the Schengen area. In the meantime, it is a tool for mass surveillance.

Concerning its legal and technological set up, VIS consists of a centralized database the Central Visa Information System (CS-VIS) and national interfaces (NI-VIS) linking it up with the national visa databases (VIS Decision, Article 1).[137] In a parallel fashion to the SIS II adding, amending and accessing data to the VIS is the task of the national visa authorities (Article 6., Article 24, VIS Regulation)[138]. The flow of data is thus also directed from the member states

[137] Council Decision of 8 June 2004 establishing the Visa Information System (VIS) (2004/512/EC), OJ L 2013/5

[138] Regulation (EC) No 767/2008 of the European Parliament and the Council of 9 July 2008 Concerning the Visa Information System (VIS) and the exchange of data between Member States on short-stay visas OJ L 218/60 (VIS Regulation).

towards the centre. Interestingly national law enforcement agencies and Europol, a European agency, have limited access to VIS data (VIS Regulation, Article 3). The operational management of the CS-VIS lays with an EU agency, with EU-Lisa now fulfilling that task, while the NI-VIS falls into the domain of the member states (VIS Regulation Article 26, Article 28, VIS Regulation).

Copying of data from the central VIS is limited (Article 30, VIS Regulation). The Responsibility for developing central and national systems lay with the Commission (now with EU-Lisa) and the Member states respectively (Article 2, VIS Decision). The Access for law enforcement purposes was regulated in a further Council Decision.[139] This an example for function creep. The law enforcement functionality was quickly-only one year after the first decision on the VIS -added to the visa functionality (Council of the European Union, 2008, Preamble of Council Decision 2008/633/JHA). It is worth mentioning that this decision was still made before the implementation of the Lisbon Treaty and under the old more inter-governmental rules of the so-called Third Pillar, which was Title VI TEU dealing with police and judicial corporation. It is thus a Council Decision under pre-Lisbon rules and not a Directive or Regulation, which was a regular procedure for that specific policy field that hints to the continuing centrality of the Council and thus the member states for JHA policy-making.[140] Currently it is planned to deepen the VIS which includes lowering the age threshold for fingerprinting down to 6 years and including in the VIS long term Visas and residence permits (including law enforcement access to that data). The latter would mean a massive increase of the population whose data is retained by the VIS (Statewatch ,2019).

Eurodac is another database that is of central importance for the European border surveillance system and for the European border regime as a whole. It

[139] Council Decision 2008/633/JHA of 23 June 2008 concerning access for consultation of the Visa Information System (VIS) by designated authorities of Member States and by Europol for the purposes of the prevention, detection and investigation of terrorist offences and of other serious criminal offences, OJ L 218/129

[140] This means without involving the co-decision power of the EP. (Craig, P. P.., De Búrca, G. 2015, pp. 965-972).

was also the first system using biometric identifiers, and is at the heart of the current initiatives on interoperability. It is intimately linked up with the Dublin Regulation. Eurodac purpose was and is to make the Dublin Regulation's rule of first entry a reality and prevent "asylum shopping". Right from the beginning it contained the fingerprints of third country nationals (and stateless) persons older than 14 years who had either been caught illegally crossing a border or illegally staying in the Union and/or applicants for international protection (i.e. refugees). Under the current regulation retaining the data the of the last group of people-third country nationals and stateless persons not caught crossing borders illegally but staying illegally in the Union-was optional not mandatory. In the context of the ongoing reform plans of the European Union's border database the scope of Eurodac should be extended. Besides fingerprints, also biometric facial data shall be included into the data set. Along goes a significant extension of the categories of people whose data shall be included into the system. Firstly, the age range of the people whose data shall be included into the system shall be lowered to children of the age of six. An obligation for member states to collect the data of those staying illegally in the Union and a prolongation of the data retention period from 1 ½ years to five years is under discussion. (Dumbrava, C., 2017, p.16). The current (2013) regulation already gives limited access for law enforcement purposes to Eurodac data (deviating from its initial purpose). A further easing of this access is currently under discussion (Dumbrava, C., 2017, p.16, Council of the European Union & European Parliament, 2013, European Commission, 2016).

The described development is an example of function creep. One of my interview partners also depicted the function creep referring to Eurodac-data:

"For the databases that existed before, as for example Eurodac, the intended purpose was quite limited. They were almost only used for purposes relating to immigration law, such as the comparison of asylum applications. Then, the police said: 'Perfect, here we have a database full of faces and fingerprints, so let's use it.' As for the purpose of the database, it has simply been adjusted afterwards." (Interview with ASc.S)

Looking at the political functionalities of the Eurodac database it could be described as population tracking device for some populations. The aim is to uphold a rule set that keeps s certain population in the physical place they have been assigned to. To link up to the theory chapter, it reminds of the “anti-desertion, anti-vagabondage, anti-concentration” that Foucault described (Foucault, M., 1995/1975, p. 143). The “rule of functional sites” is a part of this process. It is an attempt to create a “useful space” where individuals and the flow of goods and information are permanently monitored, assessed, and controlled, or at least where the identities of the people entering it are digitally fixated and identified (Foucault, M., 1995/1975, pp. 143-144). On a political level it has also become a tool in the conflicts about the problems related to the Dublin Regulation and the distribution of migrants. Non-compliance with the Eurodac Regulation by some member states with the Eurodac system and its legislation has been a conspicuous political tactic. Some of the proposed new legislation-the obligation of registering all illegal migrants- are an attempt to reduce these tactics, as the Commission almost openly admits in the explanatory memorandum on the reform of the instrument (European Commission, 2016, pp. 2-3). Power struggles between the national and the supranational level of policy-making, member states interests, law, policy and technology become visible here and intimately intertwined.

The technical setup of Eurodac is similar to other databases such as the SIS or the VIS. It has a central database and national access points, although, it is more centralized as the central database is the repository for the data. The data is still entered by the member states, which are by and large the responsible parties for the execution of the tasks (Eurodac Regulation, Articles 3-19). The somewhat stronger central set up with the European database as the central data repository could be seen as an increase of power for the supranational power network. Given that the importance of the overall EU border surveillance system and with it the involvement of the supranational power network, the supranational institutions and the EU agencies increases such an interpretation is in principle possible. What cannot be denied, and might be the background for the technical changes, are the very practical conflicts about the proper implementation of the Dublin Regulation and hence Eurodac rules. This concerns

the conflict between those states bearing the bigger part of responsibility under the current Dublin rules on the one side, and those profiting from them and the Commission as the guardian of the treaties on the other. The member states profiting from the current state of Dublin and the Commission have a practical interest in the strict application of the Eurodac regulation, in opposition to the Border States who have little interest in continue to register and take in refugees the majority of the refugees. The result was sometimes a rather concrete obstructionism on the part of the border member states (Alexander, R., 2017, p.100).

The VIS and Eurodac are not the only existing biometric databases. Since the introduction of the Automated Fingerprint Recognition System (AFIS) the SIS II also belongs into this list of biometric systems (Monroy, M., 2018d). Added to the list should be the Prüm framework, which is a law enforcement-oriented instrument. While it is part of the EU legal framework, not all member states participate in it. It allows participating states to mutually exchange DNA data from their law enforcement databases and vehicle registration data in specific event with cross border- dimension. Giving Europol access to the data is under discussion under the Commissions Interoperability roadmap (Dumbrava, C., 2017, p.18-19). It is not a border database in the strict sense, but it is politically sensitive JHA database and that is the reason why it is included here. Prüm and its database can be categorized as a form of classical police surveillance, which focuses on specific populations and individuals, which are already in the focus of the respective police forces. It does not attempt to predict or filter new suspects, nor does it target a huge number of persons for the simple fact that they are moving across borders, and therefore it has a more limited target population and a different character than many border related databases and instruments, as it is not a form of mass surveillance.

The existing databases and instruments are not the end of the development of the EU's border surveillance landscape. The entry-exit system (EES), the European Travel Information and Authorization System (ETIAS) and a version of the ECRIS on third country nationals (ECRIS-TCN) have passed the politi-

cal process (Council of the European Union 2017, 2018, 2019). They are scheduled to be implemented and realized in the next few years.

The entry-exit system will gathers the data of all third country nationals entering the Union whether they require a visa or not, including non- Schengen member states, including rejected applicants, and those allowed for a short time stay (proposed EES Regulation, Preamble, stanza 8).It is will be an biometric system including four fingerprints and a biometric facial image, visa holders with fingerprints in the VIS will only have their facial image recorded in the EES (proposed EES Regulation, preamble, stanza 11). The crucial aspect is that it calculates the legitimate stay of the third county national and if he or she has overstayed his or her legitimate stay (staying in non-Schengen states is not added to the length of stay) (proposed EES, Regulation, Article 10). The technical architecture is similar to other systems (proposed EES Regulation, preamble, stanza 12. The EES should be interoperable with the VIS (proposed EES Regulation, preamble, stanza 13). An interesting aspect, bridging the boundary between private and public actors is the “web service” that should be developed and enable carriers to check whether their passengers have already exhausted the number of entries admitted by their visa. The web service should also be available for the third country nationals themselves (proposed EES Regulation, Article 12). The data retention period should be 5 years (proposed EES Regulation, Article 31). Designated national law enforcement agencies and Europol will get access to the EES (proposed EES Regulation, Articles 26-30). In exceptional cases third countries shall also get access to the EES (proposed EES Regulation, Article 38). The data is also explicitly retained, to be used for statistical and risks assessment purposes, which are in turn legally grounded in the Schengen Border Code including the travel route (proposed EES Regulation, explanatory memorandum, preamble, stanza 26, Article 5 h). To supersede the stamping of passports is furthermore part of its purpose (proposed EES Regulation, explanatory memorandum, Rationale). Entering, amending and erasing data still is the domain of national authorities (proposed EES Regulation, Article 8). The EES creates alerts and list concerning over-stayers (poposed EES Regulation, Article 11). Other databases and systems such as passports are linked up with the EES and can be sources of

data for the EES (proposed EES Regulation, Articles 14-18).[141] The EES is scheduled to be operational in 2020.

The EES is first and foremost a collective tracking and accounting device, tracking the duration of stay of targeted populations and individuals, and informing different stakeholders on their legal status. The fact that it is not only concerned with immigrants, but with everybody who falls under its legal regime is a significant extension of the reach of the border surveillance system. It is also a first step towards the automatization of border control. It is furthermore an important step towards the digitalization and the algorithmisation of the border regime. While the calculator and the automatic alerts are arguably not among the most sophisticated and intrusive techniques of mass surveillance, their role as an entry-technology for automated border control and surveillance are still significant, especially considering that the plans for the initiation of ETIAS go back to 2008 as was shown in chapter 2 proposed (proposed EES Regulation, Preamble, stanzas 1 , 2).

While visa- holders applying for a Visa are subject to a vetting process, such process does not exist for non-visa holders. ETIAS- the acronym stands for European Travel Information and Authorization System-should fill this gap in an automated fashion. The travellers will have to fill out an online questionnaire. This includes contact data and a number of background questions, for example employment history or related to security and public health issues. This includes relative specific details such as home address and travel address and informational selectors such as phone numbers, e-mail addresses and IP-addresses (proposed ETIAS Regulation, Article 15)[142]. Their data will be then automatically checked against the EU border databases (all the already mentioned databases plus at least one additional Interpol database). If there is a hit in one of these databases the vetting process might be continued manually and the permission to travel might not be given. If the permission to travel is giv-

[141] National passport systems, with all their complicated interplays of different artefacts, databases etc. are technological systems as well.

[142] Selector is a term that designates a bit of information that allows to identify a target of surveillance.

en, this alone does not guarantee entry, which still might be denied by the border guard at the point of entry. Permission of a travel authorization will be another pre-condition for entry but as such does not constitute a guarantee of entry (Dumbrava, C., 2017, p.23). ETIAS will check files applicants according to “specific risk indicators”. It will also include a watch list of persons who are suspected of crimes or terrorism, and the system will check if an applicant is connected with them (proposed ETIAS Regulation, Articles, 28, 29). Interestingly the central ETIAS unit will be assigned to the European Border and Coast Guard (Frontex) (proposed ETIAS Regulation, Article 7). Access for national law enforcement agencies and Europol is given under specified circumstances (proposed ETIAS Regulation, Articles 43-46). it is worth noting that the limits of the CJEU’s Digital rights Ireland Judgment (CJEU, 2014) are explicitly referred to (preamble amended ETIAS Regulation, recital 34). As it is sensible from the perspective of the state, border authorities have access as well (proposed ETIAS Regulation, Article 41). The data retention period is limited to the validity of the travel authorization and to five years in the case of a refusal or revocation (proposed ETIAS Regulation, Article 47). Applicants will have to pay a fee for applying for a travel authorization, which will be used for financing the system (proposed ETIAS Regulation, Article 16, explanatory Memorandum p.15). This is interesting from the perspective taking infrastructural power into account. The fact that there is a central ETIAS unit assigned to an EU agency with some direct responsibility for dealing with data, is also very interesting from this perspective (proposed ETIAS Regulation, Article 7). From the perspective of digitalization, the ETIAS screening rules and the watch list are the most interesting innovations in the proposed instrument. They are a form of the digital disciplinary mechanisms that have been theorized in chapter 3 and will be further discussed in chapter 5, assigning people into categories, in this case into categories of potential risks. It is a profiling/ risk-screening algorithm, assigning risks concerning illegal migration, public health and security issues. Based on statistics in the ETIAS and the EES, as well as input from member states and the World Health Organization, it will assign risk factors to specific groups of people along broad lines of eth-

nicity age, gender and occupation while in the meantime staying non-discriminatory (proposed, ETIAS Regulation, Article 28 (5)).

If it becomes realized in the described form, ETIAS would be an important step towards the digitalization of the border-system. It would be only a partially automated system as throughout the instrument there is a complicated set of mechanisms that ensures that the diverse stakeholders intervene once an automated alert has been triggered.

As can be seen ETIAS will be closely linked with the EES once both systems are realized. ETIAS relies inter alia on data of the EES. ETIAS also strongly relies on data of the other border databases, indeed checking applicants systematically against these databases is one of its main purposes. Both systems will be part of the interoperable meta-system (see below).

Another system that will be part of this meta-system is the ECRIS-TCN.

The existing ECRIS on Union citizens is a de-central information system on a hit/no hit basis allowing authorities in the member to check on criminal records in other member states, although a centralization, new indexation and inclusion of fingerprints is under discussion (Dumbrava, C., 2017, pp. 20-21). The ECRIS-TCN would be a centralized database of criminal records of third country nationals, including fingerprints and probably biometric facial images which might be possibly used for other purposes than identification in the future. It will be technically integrated with the existing ECRIS software (Draft ECRIS-TCN Regulation, explanatory memorandum, pp. 11-15).

The EES and ETIAS are systems with a (mass-) profiling and sorting functionality attached to it. The same goes for the retention of passenger data: the API and PNR Databases. They both concern everybody who travels across the EU borders. API Data concerns the machine-readable part of the travel data: name, date of birth, passport number and other data. It can also contain biometric data. It is stored based on a directive going back to the year 2004 while the PNR databases are running on the basis of a directive that has just recently been implemented (2018) (Dumbrava, C., 2017, pp. 20-21, European Commission 2019). API data is gathered from air carriers crossing borders, PNR

data concerns cross-border flights, and member states can retain the data of intra-union flights. Retaining passenger data towards other means of transport was in the discussion as well, but so far this is only retained by some states on the basis of national legislation (Krempl, S. , 2018b). API and Passenger Name Record data are put to different uses. While API data is checked for alerts, PNR-data is used for algorithmic profiling purposes looking for patterns and associations (Dumbrava, C., 2017, pp. 20-21). PNR data is extensive and includes such data as travel routes or means of payment data. Some of the data is quite specific (seating in the flight) and can indirectly lead to sensitive categories of data, for example on-flight meal choices hinting at religious identities. The retention period of PNR data under EU law is five years (after 6 months they get anonymized) both sets of data are stored in a decentralized fashion by the Member States (Dumbrava C., 2017, pp. 20-21, Rodrian, H. W. , 2018). It is a proactive, analytical form of surveillance that stands out in contrast to most other, more limited databases discussed here, and comes closest to the form of algorithmic mass surveillance and mass profiling that many critics of big data-based surveillance fear. It is arguably one of the surveillance measures which is most deeply integrated with the panoptic surveillance ecosystem of everyday life. It is the potentially biggest contributor to an indirect panoptic effect described in chapter 3 and 5. Accessing the data from everyday life for the purpose of the state has, by the way, already been discussed in the EU. Already back in in 2008, there were EU policy papers even discussing access the internet of things for security purposes (Bunyan, T., 2008, pp. 30-37).[143]

By now, some characteristics of the European border surveillance regime can be identified. Most databases are centralized, but as it has been shown, the centralization is relative as the member states insist on retaining their power

[143] From the perspective of power structure research, it is certainly a very interesting side fact that small private aircrafts are exempt from the obligation of gathering PNR Data and a number of other controls. It should be obsolete to mention that private aircraft are the favourite means of transportation of the rich and powerful as well as organized crime. This exemption made it into the relevant Directive and is still upheld despite some attempts on part of the EU Parliament to end it (Schumann, H., Simankte, E., 2018).

even in the setup of the database. The fact that the member states are very reluctant to give up sovereignty, control and data in this policy context has become very clear through the technological and legal setup of the systems.

The different surveillance systems taken together and the ensemble of surveillance systems in interplay with each other clearly constitute a technological system of mass surveillance. This technological system of mass surveillance consists of systems that are focused on particular groups in the context of police and judicial work, others which focus on very broad categories of people and some whose target group is so big that they can be categorized as almost indiscriminate forms of mass surveillance. The use of biometrics has become a widespread feature. The use of predictive and preventive forms of surveillance is increasing. Most of these aspects will be expanded upon in the next chapter.

The power of all these forms of surveillance can be significantly enhanced by combining different forms and sources of data. This is exactly what is planned by the new legal instruments on interoperability.

From 2016 onwards, following the advice of a high-level expert group, the Commission was and is still pushing for greater interoperability among the EU border systems. Thus, far the plans have ripened to two -because of the different legal bases and the complicated opt -ins and opt-outs in the field- draft Regulations which are currently under discussions among the Institution[144]. So far, the plans concern the SIS, the VIS, Eurodac the EES the ETIAS and the ECRIS-TCN, Interpol (SLTD and TDAWN) and Europol data. A shared European search portal would allow to simultaneously searching all these databases, a biometric matching service would allow to search and compare biometric data in the SIS, VIS, Eurodac, the EES, the ETIAS and ECRIS-TCN. A common identity repository that would contain and make searchable basic biographic data (name, date of birth etc.) in the VIS, Eurodac, the EES, ECRIS-TCN and the ETIAS, and a multiple identity detector that should identify mul-

[144] They were under discussion when this chapter was written. The proposal passed when this thesis was finished.

tiple identities of one person across the EES, ETIAS, VIS, Eurodac, ECRIS-TCN and the SIS. Law enforcement access to non-law enforcement system should be simplified by a two-step approach, and a common Message Format (UMF) for data exchange should be established. A common repository for statistics should be established as well (Dumbrava, C., Luyten, K., Voronova, S., 2018, pp. 1-6).

The proposal has garnered some criticism from within the institutions, for example from the side of the data protection agencies, as it is problematic concerning data protection principles such as purpose limitation (Dumbrava C., Luyten, K., Voronova, S., pp. 7-8). In particular, the common identity repository which would centralize biographical data from all the different databases and thus would not just be an interoperable instrument but a massive centralized identity database has drawn criticism. A similar critique is applied to the biometric matching service. In addition, the possibility of using the interoperable database for identity checks inside the EU has raised criticism (Bunyan, T., 2018, pp. 9-12). The assessment of some NGOs has been much harsher. Critics see the proposal as just the beginning and fearing that in the end all databases under the auspices of EU-Lisa will be united including those containing data of EU citizens such and the Prüm and SIS II databases as law enforcement databases already contains such data. Even bigger databases are thinkable, with consideration of the obligation of introduction of biometric data in ID Cards across the EU which is under discussion and just very recently has passed the Council (Bunyan, T., 2018, p.14, Fanta, A., 2018).

Given the longevity of many ideas focusing on given law enforcement and security services maximum access to as much data as possible, their point of view should be taken serious (Bunyan, T., 2009, pp. 37-41). It is of course impossible to assess the effect of the proposal before it is implemented. However, it can already be argued that through the eased accessibility of different data repositories the European border surveillance system certainly increases its power.

Police work, the control of the legal influx of travellers and the control of those registered refugees are not the only element in the border surveillance regime.

Eurosur is another crucial tool for border surveillance. Its character as an intelligence tool and its technical character as multi-purpose, multi-source, multi-sensor surveillance platform let it sit uncomfortably in the lists of databases that has been discussed before. However, this does not diminish the significance of Eurosur in the border surveillance regime.

The aim of Eurosur is to create situational awareness at the borders and beyond and to improve the reactional capability of the different authorities whose task is the enforcement of the border (Eurosur Regulation, Article 1). Translated from EU parlance this means that Eurosur is a surveillance tool that aims to gather analysis for intelligence and risk assessment and operational purposes. In the meantime, it provides near-real-time information for intelligence purposes and operational planning (Eurosur Regulation, Article 3 d, Frontex, 2014, Krempl, S., 2018 a). In order to do so information from different sources are merged to create a graphical interface containing the relevant data and information, the "situational pictures" (Eurosur Regulation, Article 3 d). Eurosur creates not one but several situational pictures that are created on both the national and European level and feed information to each other. These situational pictures are divided into different layers (operational layer, event layer and analytical layer) (Eurosur Regulation, Article 8). The starting point are the national situational pictures. The national pictures are provided by the national coordination centres. Their sources are information gathered from national border control systems, national agencies, border patrols, mobile and stationary sensors, national vessel tracking systems, international and European organizations, third state authorities and "other sources" (Eurosur Reg-

ulation , Article 9, Article 9 (2) (k))[145]. Satellite surveillance and the tracking of vessel positions are particularly important data sources (Interview with FE).

The platform, however, is open for information from other form of sensors and sources for example aerial surveillance with airplanes, which is still relevant (Interview with FE). The merged Information from the national system then contributes to two overarching European Situational Pictures which are created by Frontex (Eurosur Regulation, Article 10). The European Situational Pictures are also subdivided into several sub-layers, an asset layer, an event layer, and an operational layer (Eurosur Regulation, Article 10). Their sources are the information from the national situational pictures as far as relevant, information from European Union bodies and agencies including the Commission as well as other international organizations. Such agencies are for example the European Maritime Safety Agency, the European Fisheries Control Agency, the European Union Satellite Centre, The European Asylum Support Office or the External Action Service (Eurosur Regulation, Article 18). While the common European Situational Picture is focusing on the situation at the border, the Common Pre frontier Intelligence Picture focuses on the situation beyond the border. Its setup and sources are similar to that of the national and the European Situational Picture (Eurosur Regulation, Article 11). Eurosur is crucial for merging information from different sources, and for that reason, it is classified here as a meta-system of surveillance. To the uniting of sources comes the additional information from surveillance technology. Eurosur merges many different surveillance Technologies. Satellite surveillance is a very important element of Eurosur. Another very crucial technology is the tracking of ships and the algorithmic detection of anomalies in that data set to identify suspicious vessel (Interview with FE).

145 Regulation (EU) No 1052/2013 of the European Parliament and of the Council of 22 October 2013 establishing the European Border Surveillance System (Eurosur) OJ L 295/11 (Eurosur Regulation)

When interviewed, my interview partner at Frontex, argued that goal of Eurosur is indeed to cover the situation in real time, however, the expert admitted that there are practical limits towards this aim:[146]

"This is, indeed, the objective to be achieved. However, I believe that we have to take into account the current state of technology as well as the financial and human resources that are available. But the objective is to aim for complete surveillance. As I said, we are constrained by the limitations of technology and of our financial and human resources. After all, we will have to process the data." (Interview with FE)

This as an example for a surveillance technology using a heuristic, although a very technical one. These technologies do in principle not work that different from other forms of algorithmic processing and big data bases surveillance and predictive analytics. According to the interviewed Frontex representative, using such a heuristics and using algorithms in order to identify suspicious activity is needed on grounds of the sheer mass of data and will, together with using such technologies as for example machine leaning, probably be extended in the future in the context of Eurosur. These aspects will return in chapter 5 when discussing what can be considered a shift in the nature of the European border surveillance system. For that reason, they are quoted here at length:

In the beginning, of course, this technology was of interest to us as well. Automation is currently being applied in cases such as the ones I just described. We call this Anomaly Detection, but there are various names for it. As I am sure you know, commercial merchant ships are subject to specific framework conditions. Economic conditions require that the ship moves between ports as quickly as possible because that is how it generates money. There are also a couple of nautical conditions by which a ship is allowed to take certain routes only. As for the weather conditions, they are part of the nautical conditions as well. This whole set of conditions makes it possible for us to draw conclusions about the normal behaviour of a ship. On that basis, we are able to establish

[146] To be precise, the expert was talking about the Pre-Frontier Situational Picture.

certain algorithms. To do this, however, we still need to identify the ship's position by applying, for example, the Automatic Identification System or Long-Range Identification and Tracking. On that basis, we are able to set up a number of algorithms in order to, for example, receive an alert every time a ship is heading for a certain area or changes its course in an unforeseen manner, and so on. So, there are various rules that can be fed in to receive a notification which subsequently can be evaluated in order to take operative action, if necessary. Interviewer: "It seems like the basic pattern is quite similar to what is already happening in other areas where predictive methods are applied."

Interviewee: *"Exactly. But I believe that, given the technological evolution that is taking place in this field, not only regarding Big Data but also with regard to Predictive Analysis and… not Artificial Intelligence, but Machine Learning, we will see a lot more automation in the future, which is inevitable. 99.9 % of the information we receive every day, all these ship positions, etc., are non-suspicious and normal. We then have to try and filter out those who are not normal, but suspicious, and there are still many of them. It is important that we adapt the algorithms to sea areas and seasons. In summer, for example, there are hundreds of thousands of small fast boats in the Aegean Sea. Of course, this needs a bit of adjustment and fine-tuning. As I said, apart from the season, the sea area is a determining factor. A specific algorithm may perform very well in one sea area, while it generates a lot of false alarms in another. So, these are methods we apply, and they do show results. By now, we have been quite successful in detecting and capturing cross-border crime. Technology will continue to play an important role and will be of increasing relevance since there is a massive amount of information that needs to be processed."* (Interview with FE)

Eurosur also uses data from the Copernicus Programme (Krempl, S., 2018 a, Interview with FE). Frontex is prone to use new technologies of surveillance and integrate it into Eurosur. Examples would be high-end methods for the transmission of satellite data. According to the interviewed Frontex representative, Frontex often takes a leading role in adapting military technology to

civilian purposes. (Eurosur Regulation, Articles, 9, 10, 11,12, Monroy, M. 2018c, Interview with FE). The Information that is created that way is fed back to the member states and is also indirectly shared with third states, which in the future will include Libya (Monroy, M., 2018b). [147] Eurosur can be characterised as a classical surveillance tool, trying to watch over a given geospatial area, and trying to control the movement in that given border space. One could argue, somewhat provocatively, that the basic idea behind a border watchtower and Eurosur is the same. Yet such a statement would be profoundly incorrect. The geospatial scope as well as the depth of Eurosur satellite surveillance enabled by modern technology confer an infrastructural power to border surveillance agencies unprecedented in European history. The same goes for the variety of sources and the speed in which this information is merged and re-distributed. The form of speedy technology-supported intelligence present in Eurosur and in its analytical layers is a significant innovation. The intelligence gathering and the risk assessment, which are some of the tasks assigned to Eurosur follow a predictive logic, in many aspects similar to ETIAS and the EES, which together constitute a profound shift in border surveillance technology and practice. This shift is one of the themes of the following chapter.

4.2 Chapter conclusion

This chapter has described the growth and the characteristics of the European border surveillance regime. The border surveillance regime experienced continuous quantitative and qualitative growth since its inception in the 1990s and continues to do so. It started with a relatively targeted database system, the policing and customs database (the SIS and SIS II, the CIS), with policing and criminal justice databases being a category of databases that continuously was and still is being extended (Prüm, ECRIS, ECRIS-TCN, Europol databases, Eurojust). The database system got extended towards Refugees (Eurodac) and

[147] Indirectly, via the "Seahorse Network".

holders of Visas (the VIS). As a last step it got extended towards broad categories of travellers crossing Schengen borders -which is an ongoing process (API- Databases, EU-PNR Databases, non-EU PNR -databases, the EES, the ETIAS). Seen as complex ensemble it goes beyond EU- databases and includes international and non -EU databases (Interpol Databases, non-EU /third -state- PNR Databases). Some Databases are centralised (the SIS II, the VIS, Europol Databases, some of the relevant Interpol databases, Eurodac, the ETIAS and the EES, the ECRIS-TCN), some are decentralized (API and PNR databases from the EU and third states, Prüm, ECRIS, Eurojust).The use of biometrics is a regular feature and an increasing trend as well (The SIS II, the VIS, Prüm, Eurodac, ETIAS, the EES, ECRIS-TCN).The same goes for the extension of predictive forms of mass surveillance through scoring and risk assessment (PNR Databases, EES and ETIAS). Both the latter tendencies will be analysed in more detail in the next chapter.

The systems possess no clear centre although some databases are more important than others (especially the SIS II). In the case of most databases, whether centralized or decentralized the member states still control either the entering and deleting of data or the data itself. In the meantime, the supranational centre is caching up concerning data access and competences, with Frontex and in particular EU-Lisa being a crucial service providing agencies. In the technological and legal setup of the different systems and the overall setup of the system we can see the competition between the intergovernmental /national and the supranational political network of power becomes visible. The overall system will be significantly unified by the plans on interoperability linking up a number of central databases. Not a database and somewhat of a sui generis case, yet a crucial module of the border surveillance regime is the multi-platform, multi-source, multi -technology systems-of-systems surveillance system Eurosur.

All these diverse systems together create the power of the European border surveillance regime.

Now at the end of this descriptive chapter we can return to the statement made at the beginning of this section. We can conclude that the European border

surveillance regime is indeed a partly automated, partly biometric, big data mass surveillance system with an increasing tendency to apply preventive forms of mass scoring and sorting using mathematical heuristics. Thus, in the next chapter is going to look at the second part of the argument and analyse how it produces a form of indirect panoptic power, and how that is in turn related to other forms of political and economic power.

Chapter 5: Indirect panopticism, power structures, and policy-making – praxes of power in the European border surveillance regime

This chapter is more analytical in nature. It aims to capture the nature of the emerging border regime which was described in the last chapter, beyond its mere technical and legal set up and links up to the questions and hypothesis formulated at the end of chapter 3. It links up to and expands on the themes developed in chapter 3 using the material from chapter 4, my interviews and further material. The first part deals more with the effects and forms of power that emerges. It is argued, as already in chapter 3, that the European border surveillance systems creates a form of indirect panoptic power that can be analysed in the terms developed in chapter 3. The first part will describe how this power takes effect.

The following parts are more dedicated to the issue of power structures and politics, linking up to the hypotheses on the JHA policy and the politics of surveillance and border protection formulated in chapter 3. One part will describe the politics of initiating and implementing systems of surveillance in the European border regime. The surveillance special interest network plays an important role in this part. The process of initiating and implementing surveillance technology and the role of structures and networks of power are illustrated by means of a few examples. The activity of the counter-network, the civil -libertarian network are prominent in the next section which is dedicated to the resistance to the increased surveillance in the European border regime, the European border surveillance regime and crucially also beyond. A short section that draws all these aspects together concludes the chapter.

5.1 The European Border regime as a form of indirect panoptical power

A question that emerged at the end of the last chapter 3 was: What kind of power is created by the emerging border surveillance system? The form of power created from the border surveillance regime it is a form of panoptic power, which was denoted in chapter 3 as indirect panoptic power.

The systems of the European border surveillance regime are panoptical designs, and they create huge repositories of data to be used when needed. For those subjected to them they create the looming possibility that there is data somewhere in the systems that can have an adverse effect on them, for example flagging them as part of risky category in the ETIAS or the PNR Database or being erroneously flagged by the PNR Databases because a confusion of names, a regular occurrence since the implementation of the European PNR Databases (Endt, C., 2019).[148]

The disciplinary effects are also in the system designs, not that much in the behaviour of those people subjected to them. It is the sum of all this, steering, watching, predicting, preventive, controlling, sorting and filtering system that is disciplinary, not the relatively rare knowledge of their existence. It is their dispersed character and their disciplinary logic that makes them panoptical.

Let’s start with the disciplinary logic and its underlying epistemology. The European border surveillance regime are panoptical systems because in their design and in their intention, they follow the disciplinary logic of comprehensive surveillance described by Foucault. While Foucault developed his concepts on the basis of ideas practices and the epistemologies of the 18th and 19th century, the disciplinarian paradigm he describes and its praxes is surprisingly mirrored in the digital practices of the 21st century.

[148] Since August 2018, when the German PNR Database implementing the EU PNR Directive went operational, 99,7 % of all hits were false positives (Endt, C., 2019)

This is not to argue that there is a seamless continuity across the centuries rather that they follow similar epistemologies and praxes of power theorized as disciplinarian by Foucault. The following will essentially draw on the theoretical chapter. There it has already been argued why modern systems of surveillance in general and the European border surveillance regime as well are panoptical and disciplinarian technologies. Chapter 4 has shown the technological characteristics of these systems. The description of these technological aspects makes it possible to apply the theory on the concrete technological case.

They are, forms of what Foucault calls hierarchical observation (Foucault, M., 1995/1975, pp. 170-177). In adapting Foucault's concepts to the case, it is argued here that the European border surveillance systems are an attempt to grasp a given social phenomenon or spatial area-immigration and the border-in its entirety in order to steer it according to the political will of the existing power structure-the EU. It is a form of technology expressing the nexus between power and knowledge that was a continuous theme in Foucault's work (Fink-Eitel, H., 1997, pp. 7-21). Steering migration needs knowledge of the movements of migrants and travellers this and knowledge needs surveillance. It is one form of producing discipline. The European border is an attempt to grasp, monitor and manage the European border space. In order to be effective such surveillance needs to be comprehensive.

Here a link can be made to enlightenment ideals of knowledge and control, which Foucault saw expressed in the mines of Arc-et-Senans, or as is expressed in the lucid quote of the Marquis de Vauban cited in chapter 3. It is the desire for a readable and manageable society. (Foucault, M.,. 1995/1975, pp. 170-77, pp. 173-174, Scott, J. C. 1998, p. 11). In this case this only concerns the management of the border and migration and travel across it. Policies such as Integrated Border Management aim to create such a manageable border space and thus demand enough surveillance and analysis to fulfil this task. It is for example also the explicit purpose of the Eurosur system that no refugee steps on European soil without being detected:, as the interviewed Frontex expert pointed out:

"When taking a look at Eurosur and the Eurosur Regulation, it becomes clear that one of its objectives is to make sure that no undetected (i.e., no undetected migrant – note of the author) enters Europe." (Interview with FE)

That such an aim cannot be reached without massive surveillance is not surprising. Systems such as the EES, the ETIAS, the VIS, and the PNR Databases and also Eurosur aim at very broad categories such as everybody entering the Schengen area with a Visa, everybody who is entering as a Third-Country National, or just everybody who crosses the border. Especially taking their interplay and interoperability into account, a policy oriented towards control sharing a similar epistemology emerges. Technology of surveillance, here of border surveillance, emerges as the Foucauldian "relay" of control, the means of creating knowledge and order at the border (Foucault, M 1995/1975, p. 174). Here is the nexus between policy, power, knowledge, surveillance and discipline manifested in the border surveillance regime. This link is on the one hand clearly the product of a political will expressed in policies, on the other hand also rooted in technological and practical necessities. What looks invasive, overreaching or even dystopian from civil libertarian perspective might look sensible and necessary from a policing and border protection perspective.

Not unlike the grand visions of order through surveillance described by Foucault, there is difference between formulating such ambitious policy goals as that quoted above and implementing it in practice.

The same Frontex expert admitted (regarding Eurosur), that the aim stated above was difficult to realize due to limits of resources.

"This is, indeed, the objective to be achieved. However, I believe that we have to take into account the current state of technology as well as the financial and human resources that are available. But the objective is to aim for complete surveillance. As I said, we are constrained by the limitations of technology and of our financial and human resources. After all, we will have to process the data." (Interview with FE)

There are many examples of these practical limits.

The implementation of the SIS II had a delay of more than 6 years (Monroy, M., 2014). Several perpetrators of terror attacks were on national and European watch lists, however, sometimes in the wrong categories (Kahl, M., 2016). Elsewhere fingerprint scanners for Eurodac sometimes could not handle the strong Greek sun (Interview with AcPE II). Many of the discussed systems (for example Eurodac) depend for their functioning on a systematic registration of the targeted population, which simply was not the case in the crisis in 2015, and these systems were not designed with a sudden mass influx in mind, as one respondent rightly remarked (Interview with Ac.3).

These examples should be enough to show that there is discernible gap between policy design and policy implementation.

The disciplinarian character of the European border surveillance technology is also identifiable in the technology itself. The EES, the ETIAS and the different PNR-Databases are a case in point.

What the EES, the ETIAS the PNR Databases and Eurosur have in common is the rise of predictive surveillance and its combination with risk assessment logic. Risk assessment is also an element of IBM. This is a significant shift in the methods and purpose of surveillance. Older systems, like the SIS I, were mostly focused on groups of people that were already in the focus of the authorities in one form or the other. The proposed systems take the filtering function of the border system to a next level. They try to pre-emptively filter out those who are either already known as problematic, those who are about to be considered problematic or rule breaking and those who are not yet known, but whose data indicate potential problems.

Disciplinarian qualities are discernible in many big -data -based systems of surveillance.

The technologies and methods that are used by the border surveillance systems are in principle not that different from other big data-based systems. As already mentioned in the last chapter, there is no fundamental difference between the technologies that Frontex uses in Eurosur and other form of predictive analytics and machine learning (Interview with FE). Another expert also

emphasized the commonality of the border surveillance systems and other big data systems that rank and sort their targets:

"The technological bases are quite similar for all of these systems since they are basically built on the same principles, which are the methods of machine intelligence. That means that these systems are capable of recording and recognizing images, identifying fingerprints, identifying previously unknown persons, and detecting certain conspicuous patterns.

There is barely any difference between these systems and those used to detect anomalies at train stations, for example, such as people stumbling and falling to the ground, people spraying graffiti or people taking unusual routes through the European Union.

All of these methods are transferable […]. By feeding them the relevant data, they could probably even be useful to determine whether people are creditworthy. Because finally, it is all about identifying patterns. So, when I teach the system to recognise a specific pattern, it will do so, no matter what it is about. But here is another important question: What data do I feed into the system? And how do I teach the system what should be considered as normal, what it should recognize, and what it should report as conspicuous? What is still involved here is the human factor, or the data basis, which defines what is to be evaluated as normal behaviour or as a normal pattern when entering and leaving a country. I could, for example, decide to define as normal a person travelling six or seven times a year from the European Union to certain countries and back again. Or I decide to define this as conspicuous behaviour. This assessment takes place at a political level, and the results then have to be fed into the systems. A major problem, however, is that these systems are quite opaque. Nevertheless, the final decision should still be made by a person and not by a system [...]." (Interview with AJ2)

The similarity of different big data-based systems even goes down to the underlying software as one expert emphasized:

"In fact, these systems are not necessarily different from each other. This is illustrated very well by the example of software used by the police. Many of

these systems, such as the IBM systems, are based on Analyst's Notebook. Now, in the first place, Analyst's Notebook has not been developed for the police, but for controlling complex industrial processes. There are also libraries using this product. It is used wherever large amounts of data have to be structured in a meaningful way in order to allow for forecasts and controlling. An automotive company, for example, might want to have a software to solve problems like: 'We will need 30 of these screws within two days. Transport by ship, however, will take too long. Transport by plane is a lot faster, but more expensive, too. So, should we wait and stop production because of these 30 screws? Or rather…?'

Processes like this can be managed by such systems, and they have also been implemented for the police. And there is nothing unusual about it, developing user-specific software is precisely the software industry's everyday business. In this respect, there is actually no difference between these systems." (Interview with ASc.S)

The expert also mentioned the PNR Databases and ETIAS as examples of systems that use scoring:

"PNR are basically the components of a scoring database and these records allow for inferring suspicious travel patterns. So, for example: Did a specific person choose a flight from Istanbul to Frankfurt via Egypt or via Tunis? Did they, or did they not, eat pork on their flight? Did they book a hotel room for their stopover together with another person? And did they book their flight with the same travel agency as other persons who have become suspicious in the past? PNR is a prime example, and so is ETIAS." (Interview with ASc.S)

The point of similarity between different forms of surveillance and big data-based technologies leads us to an important aspect why these technologies in the European border surveillance regime can be considered to be disciplinarian /panoptic technologies. It shows that the technologies of surveillance, as far as they use technologies such as scoring or machine learning work on same technological basis than comparable technologies used in other sectors. Chapter 3 already explained the mechanisms of the normalizing judgments and the

exam (Foucault, M., 1995/1975, pp. 177-195). It also explained in how far the heuristics of filtering, profiling, sorting and scoring and ranking shares some similarities from the heuristics of disciplinary ordering and ranking described by Foucault, which is prevalent in many big data, based ranking systems. The score or the assessment, it is the mechanism that dashes out reward and punishment and in some cases the rise and fall in a rank or score is the reward or the punishment itself. Often the score is measured against a certain threshold, and the individual is ranked and scored against this norm or threshold. Here it is where also the normalizing judgement and the exam turn up in new guises. A good example is the scoring system for the quality of teachers in Washington D.C. described by O'Neill (O' Neill, C., 2016, pp. 3-11). The score would rank the teachers' performance according to the criteria inherent to the algorithm which provided by a consultancy can therefore not be analysed. The bottom five percent of "underperforming" lose their job. Here the score is creating the rank, the hierarchical observation that orders, it becomes the threshold, the normalizing judgement against which the individual is tested and "examined". The algorithmic score becomes the exam. If teachers score badly, they fail against the norm and are sorted out. An important aspect is that in many big data systems, also in the mentioned case, the assessment is often made on the basis of mathematical probability.

Similar, not identical, mechanisms are also present in the border surveillance systems. ETIAS for example will check the applicant against the European border databases as well against a set of risk indicators (proposed ETIAS Regulation, Articles 18, 28). Technically this is not the same as assigning a score, although the process is similar. It is a form of examination, in which the applicant is made a case, examined against existing data (proposed ETIAS Regulation, Article 18). The applicant is thus examined against a threshold, which is in this case are the existing border databases. One could argue, transferring Foucault's concepts to our case, that they constitute a form of normalizing judgement. The normalizing exam is repeated in the next step, when the applicant is tested against the ETIAS risks indicators (proposed ETIAS Regulation, Article 28). Here again assigning risk is a probability exercise: People

from state W, with the social background X have a higher probability to carry danger Y and thus are categorized into category Z.

In the case of PNR Data the process is similar. Passengers and their very diverse data contained in the PNR datasets are checked and profiled against databases, indicators of crime and terrorism by looking for associations among people and behavioural patterns. Again, it is an exercise in probability. If an individual happens to raise suspicion because of their data, it becomes the target of further scrutiny. It is a form of data processing assisted mass profiling in which risk is assigned by relating data to probabilities of committing crimes. People who do x are potentially more likely to do y. (Rodrian, H. W., 2017, Dumbrava, C., 2017, pp. 19-20, Interview with ASc.S)[149]. This is combined with checking against existing databases and watch lists. Sometimes, as in the cases of No –Fly –Lists (in the US), the outcome of that checking exercise can be patently absurd, for example when a 3-year-old ends up on no-fly list (Interview with AJ3). The EES would be somewhat simpler as it produces lists of people with their basic travel itineraries, countries of origin and whether or not they have left the Schengen Area in due time. An activist from the NGO Statewatch described this approach dryly as “accounting” (as re-told by my respondent who does not work for this NGO) (Interview with ASc.S). The EES creates categories, taxonomies of people and of legalities (legal stay /illegal stay), however, it does not assign qualities beyond that (proposed EES Regulation, Article 11).

Indirect panoptical power arises throughout a dispersed form of surveillance, through many different forms of sources of surveillance and systems of surveillance. They may be indirectly linked meaning that one source of data or one type of data which was created in one context is used in another context. An example would be the way a passenger buys and pays for an airplane ticket. The data produced in that context had the primary purpose to be used in a financial and commercial context. However, in PNR databases it is in a border protection and security context and is used for a security related scoring pro-

[149] See the interview passage quoted above.

cess. The way a certain individual buys an airplane ticket may rise suspicion in that context (Rodrian, H. W., 2018). Commercial data becomes security data and acquires a new meaning. Sometimes data and data sources are brought together on purpose as in the case of the EU interoperability plans. In any case the effect is panoptic as an individual can in practice hardly know when and how their data is used in a given system, which system is linked with which system and which algorithm has which heuristic using what kind of data. Indirect panoptic power also arises out of the disciplinary logic of the functioning and heuristics of surveillance systems.

As already mentioned in chapter 3 internalization is relatively absent, and depends on the concerned individual's knowledge of the system(s) existence and functioning. This knowledge is in the case of the European border surveillance system rather low. Most of the existing border surveillance systems are not well known among the general public (European Commission, 2018, pp. 5-7 p.63-65). The Frontex expert which was interviewed argued that the border surveillance systems of the European union are not known to the Refugees and only some national surveillance systems such as the Spanish SIVE system are known to the organized human traffickers (interview with FE). During the Interviews, the experience was that among the interviewees, which by and large represented a mixture of privacy and policy experts, activists and the well-educated public (see appendix) knowledge of the existence and the details of the European border protection surveillance was far from universal (Interview with Ac.2, Interview with Ac.3.). There were documented cases in which the border guard personnel which was supposed to work with the system (in this case Eurosur), had never even heard of it (Schumann, H., Simankte, E., 2016). On this basis it can be argued that an internalization effect is largely absent. It is more their functioning that makes these systems both panoptical and disciplinary.

The term panoptical is used with a certain liberty and with caution here. As stated above, the internalization effect is largely absent. Nor is there any evidence that the concerned systems were designed with such an effect in mind which is not surprising when looking at their target. Designing and using po-

lice surveillance systems in order to create internalized and panoptic disciplinary systems with the purpose to create a panoptic internalization effect is conceivable in the framework of Foucault. However, systems such as Prüm or the SIS are not designed with such an effect in mind. They are designed to monitor suspects and suspicious things and movements that are already in the focus of the authorities, not prevent people from breaking the law. In some cases, such as the covert article 36 surveillance (see below), knowledge of the surveillance might even be counterproductive from a policing point of view. It is a possibility that classical panoptic and internalizing side effects were part of the policy plans and design of the policing-oriented systems, however, the author of this thesis not aware of any evidence that points in that direction. In the case of those system targeted at migrants such an effect is extremely unlikely as well, as they, as already pointed out above are not known among migrants on their way to Europe (Interview with FE).

There is the possibility that there is both a deterrent and internalization effect on relatively small subsets of the population that are aware of the existence and the functioning of the border surveillance systems, in particular political activists[150] and scientists that travel frequently. One respondent mentioned the issue concerning scientist and travelling professional in general and also hinted at a general potential deterrent effect for the whole of society:

"There is an enormous deterrent effect created by the fact that when crossing borders, we will consequently question ourselves about how this border crossing might be perceived by certain systems, for example. The deterrent is produced all at once by an evaluating system judging whether the route that I am taking is unusual. This can become a huge problem, especially for professional travellers or scientists, if their actions or itineraries are rated conspicuous.

[150] Police databases, national and European ones, have been used against political activism, especially in the context of summit protesting for a long time. This concerns inter alia informal exchange of data, Europol databases, the ECRIS /ECRIS-TCN, if going to be realized the EPRIS, and Prüm. There is also the long-standing plan of creating a "troublemaker" (i. e. international protester) databases which, however, still has not found a majority among member states (Monroy,M.,2017).https://www.cilip.de/2017/07/11/datenbank-zu-europaeischen-extremisten-wie-soll-der-seit-2001-verfolgte-plan-funktionieren/

It is just as problematic if society accepts to be completely trackable, everywhere and at any time." (Interview with AJ2)

From the point of view of a lively democracy such a chilling effect towards scientists, and one ould add political activists as well, would be highly problematic in itself. Even if it only hurts a minority, it is still detrimental for democracy. The validity and legitimacy of exercising fundamental rights is never up for a majority vote.

The indirect panoptical effect is also created through the mass of data, the number of access points to the systems, the growth of the number of systems, the extension of the categories of people and data, the increase in predictive forms of surveillance, the interplay among the systems and the overall size of the border surveillance regime.

The first point is that these systems gather data. Large amounts of data. The number of alerts in the SIS for example (that means person or objects that should be stopped from crossing borders, arrested, extradited or watched) has reached 71 million in 2016 (Dumbrava, C., 2017, p.11). At the end of 2017, the VIS included 49 Million visa applications and 42 million sets of Fingerprints (eu-Lisa, 2018). Eurodac contained in 2017 5 161 635 fingerprint sets (eu-Lisa, 2017). The ETIAS will arguably be a big data system as it potentially concerns 1.2 billion people. (Dumbrava, C., 2017, p.23). Given their sheer size and the amount of data they could all be characterized all as mass surveillance system. This is unsurprising by systems designed to cover a polity of the size of the EU with its population size, length of border and number of travellers entering and leaving as well as the number of refugees seeking safety.

Crucially for producing the indirect panoptic effect, this data is accessed by a large number of actors from the security sector. The data stored in the SIS II for example is used by police, customs and border police forces, immigration authorities and visa authorities and authorities responsible for traffic regulation in all 30 participating EU and non-EU Schengen states (Official Journal of the EU, 2017). In addition, this data is put to use. The number of searches in the SIS II has reached almost 4 billion at the end of 2016 (Dumbrava, C.,

2017, p.11). Between 2013 and 2015 the Commission counted around 371000 Hits in the SIS II inter alia 25 000 arrests and 79 000 refusals of entry (European Commission, 2016, p.7). It is worth mentioning that European border databases also contain very significant numbers of entries on artefacts in, particular documents, turning them into a true digital assemblage. The biggest category of entry in the SIS II by far is for example the category of stolen and lost documents with 75 % of all alerts concerning that category (eu-Lisa, 2019).

The huge amount of data combined with the large number of authorities that have access to it already creates the sort of panoptic effect referenced to in the last chapter. It is relatively hard for a person to trace what kind of data is existing in the European border regime and who exactly is having access and is using it for what purpose. It should be mentioned that by and large this panoptic effect is relatively light at least thus far the data contained in most database is relatively limited, and the access to the data is restricted. Compliance and oversight are relatively straight forward, and for many types of data it would be possible yet very laborious for a data subject, that is the person to whom the data relates to, to find out what kind of data is gathered on him or her in all the European border related databases. Therefore, it can be characterised as a relatively light form of panopticism.

The transparency in the European border surveillance obviously has its limits. There are types of data and queries, which are forms of classical surveillance that are registered and executed in relative secrecy. These functionalities increase the panoptic character of the border surveillance regime. One example are the so-called alerts on discreet or specific checks, so called Article 36 alerts, which allow for discreet surveillance or searches at borders of those people and the people that accompany them. The instrument concerns about 129412 Persons in 2017. This is a massive increase since the year before when there were 96108 of these alerts. The instrument can be used by police forces and secret services but the rights to issue alerts vary according to national law. The use of the instrument is increasing in recent years and its functionalities are about to be extended (SIS II Decision, Articles 36-39, Monroy, M., 2018).

The building up of the panoptic effect is not only related to the growth of the general amount of data, but to an increase of the number of people registered in the systems and changes in the forms and practices of surveillance.

The increase of Information systems is straightforward and has been described in chapter 4.

However, in how far they are forms of indiscriminate mass surveillance differs.

Some systems target relatively clearly limited groups of the population, more precisely those that are already in the focus of the law enforcement and legal agencies and /or they clearly first and foremost intended for law enforcement or are clearly intended for judiciary purposes. The SIS started out as an addendum for the perceived security gap from the opening up of the Schengen borders. It mostly targeted a relatively limited group of people, which were largely already in the focus of the authorities. It is not the only databases of that kind. The SIS II, Prüm, ECRIS and ECRIS-TCN, Europol and (non-EU) Interpol databases fall under this category as well. Other system target designated very broad categories of people such as refugees, people entering the EU with a Schengen Visa or travellers entering and then leaving the EU, whatever the purpose of their travel. The VIS, the EES and ETIAS fall in this category of fairly indiscriminate mass surveillance. The first group of people that was targeted in bulk were illegal migrants with the creation of Eurodac. With the creation of the VIS, the next group of people was being registered. The plans for the EES and the ETIAS will extend the digital grip on people crossing borders with the result that many travellers will be registered in either ETIAS, the EES or the VIS, mostly will be registered in more than one system. PNR Data Retentions is even more indiscriminate and catches everybody that uses aviation in crossing external EU borders.

Besides the growth of the amount of retained data and the number of people caught up in the system there are also a number of qualitative shifts in the extension of the border surveillance system.

Extending the use of biometric data is one of them and has become a widespread feature of the overall system. The SIS II, the VIS, Prüm, Eurodac, ETIAS, the EES, ECRIS-TCN use biometric data. Biometrics adds a deepening and intensification of surveillance to the overall system. Firstly, it simply adds another type of data. Secondly, it extends the data in a way that links the data in the database beyond describing features of persons (height, colours of the eye) to the body itself. It creates the possibility to identify individuals against their will with a clear individually, assignable bodily identifier which is difficult to falsify. This functionality is part of the very purpose of systems such as Eurodac, and it also creates tactics of practical resistance of those subjected to it, with refugees sometimes even going so far as to burn their fingers in order to prevent to have their fingerprints taken (Interview with Ac.2). It creates a repository of data templates that can be used (and abused) for unintended purposes. One possibility is the unauthorized use by illegitimate actors for example if databases are hacked and the templates stolen and put to use for fraudulent purposes. One respondent mentioned the discussion in Israel, where after the introduction of biometric data in ID cards, concerns about the abuse of that data by terrorist groups were raised (Interview with. Ac.2). The other possibility is a form of function creep. This can be function creep in the sense that existing databases are used for purposes they were not initially intended. But it can also be used when the identifier is used in a different context, for example when the person to which a facial biometric identifier in a database belongs to is identified with it via CCTV[151]. While thus far nothing like that has happened with EU databases, once a database with biometric identifiers is established there is always the allure to use it in such a way and in that way pushing surveillance to another level, including targeting the general popula-

[151] This scenario is fictitious in the case of the European border database, the technological possibility exists though. Technologically it works rather the other way round: data from the CCTV system is checked against a police database. The system tested by the German federal police at the Berlin Südkreuz train station works that way. It is apparently still suffering from serious technical deficiencies if independent analysis of the preliminary report is to be believed: https://www.ccc.de/de/updates/2018/debakel-am-suedkreuz

tion[152]. Another (non-panoptic) quality that is worth mentioning here is that biometric systems are more vulnerable to technological glitches such as false acceptance rates and false rejection rates. Another potential glitch of biometric systems is that they tend to exclude and fail with regard to people whose bodily features (concerning their biometric identifiers) do not fit into the norm registered by a given system (Interview with Ac.2).

Interoperability of databases could bring another qualitative shift. Combining different sources of data allows seeing hidden links, increasing the depth of knowledge on given group and individuals. While the sensible thing to do from a security perspective, it also increases the intensity of surveillance. This adds another dimension of growth of the European border surveillance system. It is not an extension in the sense that additional sub- sets of the population are entered into border surveillance system, or that new types of data are added to the system. Still combining data and easing access to data stored in different databases makes the system a far more powerful tool of surveillance. Hence, it is an extension or rather a deepening of the border surveillance system. The interlinking of databases carries the particular danger of creating, directly and indirectly, a massive population data repository which would targeting almost everyone that either lives or travels in the EU. This would not happen by increasing the number or categories of people under surveillance but by tearing down barriers between categories data that hence were divided. This brings along a number of legal and ethical problems as it undermines basic principles of data protection such as ring fences and keeping data that was recorded for different purposes apart. Combining this data makes it even more difficult for the watched to ascertain what data will have what consequences, and how and for what purposes it is and might be used by which actor. Interoperability of

[152] A good explanation how such a process would work is this interview with the Data Protection Officer of the State of Hamburg explaining the problems related to the biometric database created by the police of Hamburg after the G20 Riots: https://www.zeit.de/hamburg/2019-01/datenschutz-g20-datenbank-biometrische-gesichtserkennung-loeschung-streit

security related databases thus strengthens the asymmetry of power between the state (or rather states in this case) and the population.

This is even more relevant for the emergent mass profiling systems such as the EES and ETIAS. PNR Databases, the EES and ETIAS add an element of pre-emptive screening and profiling to the system and are a significant step towards a more analytical big data-based form of mass surveillance. However, it also concerns the increase of data that is stronger connected to everyday life and thus to what in this thesis has been called the ecosystem of surveillance. For example, the phone numbers and home addresses entered into ETIAS or the credit card data in the PNR -Datasets. This linking up of every day selectors with the borders surveillance systems should not be underestimated. Linking up the surveillance systems of border surveillance with the surveillance of everyday life has at least the possibility to extend the surveillance of the border system to the everyday life of citizens, travellers and refugees. If the plans concerning ETIAS and the EES will be realized as they are proposed, this inter linkage with everyday life data can have consequences when crossing borders. Concerning PNR data, it has already has become a reality.

What becomes discernible by analysing the diverse characteristics of the European border surveillance system is its disciplinarian and panoptic character. In the mass dimension of surveillance and the desire to actually control the border space the hierarchical surveillance is manifested. The hierarchical surveillance is combined with 21st century versions of the normalizing judgement and the exam. They are present in the control and filtering mechanisms of the diverse border surveillance systems and their logic of vetting, watch lists and algorithmically assisted profiling and risk assessment. This technological form of discipline is one part of the indirect panoptic effect. Added to that is the indirect panoptic effect created through the dispersed and re-combined surveillance in the European border surveillance regime. In the meantime, the increase of processing capacities, automated decision-making, biometrics, interoperability and scope of surveillance brings about a new qualitative shift in surveillance. All these changes are all linked to the disciplinarian indirect panoptic qualities of the European border surveillance system. Together they con-

stitute a change of the overall system that goes beyond those mechanisms of surveillance describe in the work of Foucault as well as more recent but "older" forms of targeted database-based surveillance in the European border surveillance system.

This summary requires some caveats. Firstly, the line between "old", "focused" systems and new "preventive" systems is blurry. While systems like ETIAS the EES and the PNR Databases do indeed introduce new elements into the database landscape, their filtering mechanism rely on the older databases, they should complement, fill "gaps" in surveillance and be interoperable with them. The power of the European border surveillance system, and its indirect panoptic effect comes from the interplay of different databases. In addition, there very profound differences between the phenomena by means of which Foucault developed his theories and the technologies described here. There are also subtle but important differences among digital surveillance technologies. The ranking in a 18th century classroom, credit scoring by algorithms in the private sector, security profiling in ETIAS and anomaly detection in ship tracking data might have a similar internal logic, but they are not identical. They might create a set of criteria of good and bad, make it possible to objectify a phenomenon, make it calculable and rank and sort people and phenomena according to these criteria and base decisions on the result. That does not make them identical phenomena. An 18th century schoolmaster is not an algorithm and being denied credit and being denied access to the EU are legally and socially different phenomena as well. Also assessing risks in ETIAS or via PNR databases, finding over-stayers in the EES or assigning risks and finding suspicious vessels via Eurosur are similar but not identical processes, neither legally nor technically. What these systems of border surveillance do have in common (with some reservation regarding Eurosur) is the extensions of mass surveillance and pre-emptive control on a scale and with a level of automation and speed that is new in the European border surveillance system. The automation has its limits as it is not a fully automated process as. In all systems there is a human in the loop who intervenes in the process once there is an alert.

The aspect of mass surveillance deserves some further remarks. With all its inherent growth on so many levels (numbers of systems, data retained, groups of people registered in the system, combination of data) there is clearly a tendency towards mass surveillance in the European border surveillance system. This process of growth is contingent, politically contested, constrained by political resistance and legal limits, but it is there. In addition, it is particularly relevant as the technological capacities towards mass surveillance in terms of the scale of retained data, and the capacity to process the retained data has been radically increased in the last twenty years. Without this increase in technological capability, mass surveillance would be more of a dystopian possibility, now it has become a reality. The EU border surveillance systems is a relatively limited system of mass surveillance, with relatively strong safeguards compared to the mass surveillance happening trough private companies and national security authorities in particular secret services. Nor is the EU the only actor using such systems at their borders. Nevertheless, it belongs to a continuum of mass surveillance that has become ubiquitous not only in the Western, but in the whole industrialized world.

At this point it should become clear how this assessment of the European border surveillance regime evolved, arguing that the European border surveillance regime is a partly automated, partly biometric, big data mass surveillance system with an increasing tendency to apply pre-emptive and preventive forms of mass profiling and sorting using mathematical heuristics. It produces a form of indirect panoptic power.

The border database system combines mass registration, mass vetting of identities and mass profiling of a moving population (s). It seems to imitate the function of a membrane, not unlike the port hospital as Foucault describes it (Foucault, M., 1995/1975, p. 144). It combines this filtering function with some digital disciplinary methods. However, these methods have largely the function to filter out undesirable entries in the broadest sense. In addition, it also has a demographic functionality trying to prevent the movement of refugees and tracking the travelling populations more in general. Very fundamentally its task is to support, the common visa policy the Dublin regime and the

CEAS. Which also means that the problems inherent in that policy field are inherent in the database -system as well. It can be argued that wherever the task of the information system is to make up for problems inherent in policies or their implementation -the prime example would be the Dublin Regulation and Eurodac. With these systems, however, it seems unlikely that the simple collection of data on a large scale can compromise for the deficit of not having a common migration policy.

After having looked at the way power is created in the European border surveillance regime, let's look again at the other side of the equation and analyse the power structures in the JHA fields they and how they initiate and implement policies of surveillance and the European border surveillance regime.

5.2 The politics of the border surveillance system

5.2.1 Putting surveillance on track – networks of power and policy initiation with regard to the European border surveillance system

The following section is going to look into the politics of the European border surveillance system. The first part of this section, is about the introduction of the border surveillance systems while the second part deals with the resistance against it. Because of practical concerns regarding time, space and resources, this will be done in an exemplary fashion and not each and every funding line, decision or system will be discussed.

In chapter three a number of hypotheses concerning the politics of the field of justice and home affairs in general and the politics of border surveillance in general, linking back to the theories of Michael Mann and G. W. Domhoff were put forward.

One hypothesis is that in this sensitive field the influence of the national power network (the member states) is stronger, than in other policy domains. This hypothesis was already based on the findings of chapter 2. It was on an infrastructural, a technological and a legal level confirmed by the findings of chapter 4. Also, in chapter 3 it was hypothesised that growth of surveillance technologies in the European border surveillance, was based on a mutual interest of both, the national network of power and the supranational network of power to increase their infrastructural power in the field of border control. Despite the inherent power struggles and policy disagreements in the field both networks have to gain something when increasing their infrastructural power through border surveillance. This leads to policy consensus on the extension of border surveillance that is, while being sometimes contingent and contested, surprisingly stable.

This consensus, it bears repeating, is evident in the long terms character of the extension of the border systems, which was already discernible in chapter 2. As said above the SIS I and the Customs related border databases go back to the 1990s. As written in in chapter 2 the development of the border surveillance system going on today was already laid out in the Tampere, Hague, and Stockholm Programmes. Eurodac's initiation goes back to the phase of the formulation of the second phase of the CEAS and was actually implemented in 2007. Policies that point in the direction of the ETIAS or the integration of biometric border related databases can be found already in the Hague Programme that is in the mid – two -thousands. The Stockholm Programme also makes explicit reference to Eurosur the EES and the concept of Integrated Border management as being part of Eurosur. IBM is considered a part of the functionality of the latter system by Frontex (Interview with FE). The development of surveillance measures picked up speed with the Stockholm Programme.[153]

In chapter 3 it was theorized that a strong influence of the economic network of power is likely. There appears to be an argument for the probable existence

[153] For the policy development please see chapter 2

of a strong surveillance special interest network of power which includes the defence industry, which being mostly nationally based and following a state-centric business model, is well linked to the national armed forces and security authorities. Both sets of actors profit from the extension of border surveillance: the defence industry by making a profit out of building the surveillance system, and the member states and their security and military authorities by increasing their capabilities. It is likely that all three sets of actors (defence and security industry, national security agencies, national governments) are connected to the relevant supranational and intergovernmental actors of the European level (European Council, Council of the European Union, European Commission, relevant EU Agencies). They are connected through a specific set of lobbyists, state servants, members of governments, members of the European Institutions and Members of the national and European Parliaments who are pushing policies in favour of border surveillance. These actors constitute the surveillance special interest network. The argument is that this network broadly dominates the policy-making process regarding the introduction of surveillance policies in the border regime in a way that resembles the structural corporate and dominant class dominance elaborated by Domhoff for the US, crucial differences not withstanding (Domhoff, G.W., 2014, pp. 164-172).

There is evidence for the existence of a policy-making network, where the interest of the defence industry, EU agencies and member states governments, and security agencies converge when it comes to the introduction of surveillance technologies in the border regime. An essential policy field in which this link is made is research policy, although the funding of what can also be called a "security industry / research / member state / EU executive nexus" goes way beyond research policy alone. The existence of this nexus is supported by a number of NGO reports focusing on the link between the defence industry, certain research institutions and the European institutions and the European and national security agencies. Inside this network, is constituted mostly by the defence industry, its lobby groups, research institutions, the Commission (especially DG Trade), EU agencies (in particular Frontex), some high ranking officers in the security apparatuses and some parliamentarians, the economic

network i.e. the defence industry often is the catalyst for the introduction of surveillance technology (Hayes, B., 2006, Hayes, B., 2009, Jones, C., Bunyan, T., Buxton, N. (eds.), 2017,Akkerman, M., 2016a, Akkerman, M., 2016b). Many Interviewees confirmed the views and facts made in these reports, either fully or partially, while others differed and disagreed in some aspects. (interview with FE, interview with ASc.S, interview with AcPE II, interview with AJ 3, interview with AJ1, interview with AJ2, interview with C.)[154].

This is not to say that the lobbying efforts of the defence industry completely dominates the initiation and adaption of policy proposals. It rather resembles a close coordination process where profit interests of the defence/ security/ surveillance industry meet the operational needs of the European security authorities and where an implicit policy consensus tinged toward extending surveillance is structurally dominant in significant sectors of both the national and European executive. This does not mean that all proposals of the defence industry are accepted, nor that introducing surveillance technologies never meets successful resistance. However, it shows a sometimes surprising convergence and alignment of polices and actors.

The stage for the development of an EU "security-industrial complex" (Hayes, B., 2009, p. 4) was set by the explosion of the JHA and security field post 9-11, the acquirement of new competences in the JHA and CFSP fields in the last 20 years. A crucial policy document that should be mentioned in this con-

[154] The author of this thesis is aware of the fact that NGO –reports are not neutral scientific sources, but represent a partisan view. However, given the highly politicized and sensitive nature of the issue there are few other comparable sources on the particular issue. Given the tradition of power structure research in which this thesis is situated and the fact that their work is used with the necessary distance and as primary sources and not as work on a par with the work of academics, using these sources is legitimate. Finding 100 % objective sources in this field is rather daunting, and a significant amount of the primary material used in this thesis has a partisan point of view. Lest we forget that government policies are not "neutral" nor are they intended to be "neutral". Policy-making is a form of power struggle and a normative exercise. The same caveat goes for the cited interviews as well. They represent the view of the Interviewee not an unassailable truth (and no one of those interviewed pretended otherwise). All these are sources to cross check and support the theory. This does not mean the author of this thesis always endorses the view of those who created them, or voiced their respective opinion.

text, which set the frame-working of many policies for the years that followed was the European Security Strategy (Hayes, B., 2006, pp. 11-12).

In research policy the influence of the defence industry was felt when the security relevant funding lines for both FP7 and later Horizon 2020 were formulated. A pattern emerged where the Commission creates advising bodies in which the defence industry (and other defence /security relevant industries), research organization and the executive are well represented and whose policy demands are often, if not always followed. The composition and the tags of these groups change, sometimes they become permanent, sometimes they remain ad- hoc. By and large the advisory bodies have been institutionalized. The first of these groups was, already in 2001, the European Aerospace Advisory Group, which united five Commissioners, Javier Solana and representatives of Defence Corporations inter alia BAE Systems, Finmeccanica, EADS, and Thales.[155], In their report (the so called “STAR 21” Report) they demanded inter alia an active armament industrial and R&D policy.[156] Their demand was taken up when the EU in 2003 decided to create the European Security Research Programme. As a supporting advisory body its development should be accompanied and advised “the Group of Personalities” was founded. Both decision were made largely outside the formal policy-making process in the JHA field, without a formal mandate.[157] The GoP consisted of very high ranking representatives of the Commission (DG Research and DG Information Society), the most important defence companies (inter alia EADS, BAE Systems, INDRA, and Finmeccanica) and some IT companies as well as research organizations (inter alia Fraunhofer, TNO and the RAND Corporation) as well some think thanks and MEPs, mostly with links to the defence sectors (Hayes,

[155] Javier Solanas was a crucial figure for formulating the European Security Strategy, which was an important influence on EU CFSP and JHA policy. (Hayes, B., 2006, pp.11-12).

[156] On a side note: the defence industry was also well represented in the working groups dealing with security and armament in the process of creating the unsuccessful draft constitution, the end result being, so campaigners argue, the establishment of the European Defence Agency (Hayes, B. 2006, p.10-11).

[157] Thus, arguably staying true to the tradition of informal policy-making in the JHA domain (see also chapter 2).

B., 2006, pp. 9-21). Its report (2004) demanded a "European Security Research Programme" increase of the EU defence and security R&D budget on a par with that of the US with would amount to 1 billion per year (Hayes, B., 2006, p.21). One month before the report was published, clearly following their advice, the Commission created the Preparatory Action for Security Research (PASR) (2004-06) for security research compromising 65 million euro, and despite being a research instrument it was controversially based on a legal basis which brought into the domain of DG Trade not DG Research.[158] This money came additional to security related financing in FP 6 (Hayes, B., 2006, p.20, Jones, C, Buxton, N., Bunyan, T. 2017, p.14). The advisory body transformed into the European Security Advisory Board (ESRAB) with heavy defence industry participation and a strong member state presence (Hayes, B., 2009, pp. 15-20). The actual ESRP found its home in FP 7 and was more modest in scope compromising a budget of 200 million euro per year, altogether 1.4 billion for the ESRP under FP 7 (Hayes, B., 2009, p.11). However, the ESRP was not the only security funding available. The overall EU budget for law enforcement, anti-terror measures, security research and border defence between 2007 to 2013 amounted to 3.8 billion euro, with funding lines such as for example the European Border Fund (1.8 billion), or the terrorism and other security related risks programme (600 million Euro). As the Lisbon Treaty was not in force yet, the decision-making process on these budgets was undertaken without co-decision powers of the EP.

In the current period EU budgetary and research funding period the overall amount has grown to 11 billion euros (Jones, C., Buxton N. Bunyan, T., 2017, p.15, p.9 [159]). The basic pattern repeated itself for the process of Horizon 2020.

[158] The old Article 157 TEC instead of 163 (3) TEC (Hayes,B., 2006, p.20).

[159] The list of funding lines is not exhaustive, Jones, C, Buxton, N., Bunyan, T. 2017, pp. 29-30, Section 3 gives a good oversight on the issue.

Varying fora picking up the work of the GoP and ESRAB[160] and served as meeting points for senior Management of the defence industry and related industries (especially IT) with senior EU officials, member states officials and members of the security agencies (national and European).

Besides this already informally institutionalized fora, there are a number of other events where the arms industry and government and EU representatives meet and mingle. Arms fairs are regular meeting point, so are conferences and round-tables organized by major umbrella lobby organisations of the European defence industry such as the EOS (the European Organisation for Security) or the Aerospace and Defence Industries Association of Europe (ASD) and its think-tank Security and Defence Agenda (SDA), some of these meetings are specifically dedicated to border security (Akkerman, M., 2016a, pp. 18-24)[161].

The research done by the NGOs shows that organizations and people that meet at these meetings and conferences, show a huge overlap with those that are members at the above mentioned more institutionalised fora and in turn are often the same who profit from EU security research funding and often also those that build the systems in question. Among them are the four biggest European defence corporations (BAE Systems, Airbus, Leonardo / Finmeccanica, Thales) (Akkerman, M., 2016a, p.8). Indra -which built the Spanish SIVE border surveillance system, in many respects a model for Eurosur-the already mentioned French company Safran, as well as the German conglomerate Siemens, in its role as an IT-Company, or the Spanish IT company Atos, inter alia, were identified as corporations, that profit from the extension of the

[160] The GoP (2003) and the ESRAB (2005-06) where followed by the European Security Research an Innovation Forum (ESRIF 2007-09) and the High Level Security Roundtable (reoccurring high level networking events held from 2011-14) and the Security Advisory Group (2007-13) the Secure Societies Advisory Group (2014-15 and most recent incarnation The Protection and Security Advisory Group (PASAG) (Jones, C, Buxton N., Bunyan, T., 2017, .pp.29-30,Section 2, Section 3)

[161] A list of participating Organizations (EU Institutions, national governments, security agencies and corporations) can be found in Akkerman 2016a, p.21, on page 45 there is a list of participants on border specific meetings.

European border regime (Akkerman, M.., 2016a, pp. 34-42)[162]. In the research sector there are a number of organizations that profited most from research security related funding from the ESPR in FP 7 and Horizon 2020 (as opposed to general security related funding), in particular the Fraunhofer Institutes and the Dutch TNO[163]. Fraunhofer was the biggest recipient, receiving 65,729,868 Euro in the time-frame from 2007-16 (Jones, C., Buxton, N., Bunyan, T. 2017, p.66). Looking at the list of participants of high-level meeting, advice bodies and memberships in defence lobby organizations and recipients, shows a high re-occurrence of these organizations, along with other corporations that tend to be mentioned frequently. The European Commission, EU Agencies (in particular Frontex,) and national security agencies (overall more frequently than actual government representatives) are usually present as well. The presence of both the EP and civil society is markedly lower, and those present from these sectors are often associated with the arms industry or the security agencies and form part of the network (Hayes, B., 2006, pp. 9.-11., pp. 13-19, pp. 25-27, pp. 44-45, Hayes, B., 2009, pp. 9-10, pp. 15-17, 22-27, Jones, C, Buxton, N., Bunyan, T., 2017, pp. 29-30, p. 40, pp. 36-42, Akkerman, M., 2016a, pp. 18-24, p. 45, p. 47). There is in turn a huge overlap with the recipients of EU research funding (Hayes, B., 2009, pp. 12-14, Jones, C, Buxton, N., Bunyan, T. 2017, p.30, p. 66, Akkerman, M., 2016a, p.31-33, Akkerman, M., 2016b, p. 15, p. 17[164]). Added to that corporate-public nexus are a number of agency working groups (member states and EU), ranging from highly institutionalized ones (such as COSI) to informally institutionalized ones (such as ENLETS) and the still existing Police Working Group on Terrorism. These working groups, while not always directly forming part of the industry / research / public-state / EU nexus – meaning the link between lobby groups and the member

[162] This is list is by absolutely no means exhaustive, readers more interested in the details of the issue are recommended to to read the quoted sources of this section.

[163] The TNO which stands for Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek (Netherlands Organisation for Applied Scientific Research) is a dutch independent publicly financed research organisation with a focus on applied science, comparable to the German Fraunhofer Society.

[164] The List on Akkerman, M., 2016b, p. 17 is particularly interesting as it breaks the funding of security related projects in Horizon 202 down to border related projects.

states and the EU – still form part of the wider surveillance special interest network. They influence policy and research, with the boundaries of the network being notoriously blurry (Jones, C., Buxton, N., Bunyan, T. 2017, pp. 29-30, p. 33, interview with Asc.S, Töpfer, E,. 2011).[165] [166] [167] [168] [169] The stability of the network sometimes goes beyond organisation and in some instances down to the level of persons. One interviewee even mentioned, by way of example, a high ranking officer of the German of the Federal Criminal Police Officer (who later became a very senior Interpol Officer) an example of high ranking officer with good contacts to the security industry, who indeed was a member of both ESRAB and ESRIF (Interview with ASc.S, Hayes B., 2006, p.26 and p.45, Hayes, B. 2009, p. 23).

It is a highly interconnected network of actors in a strongly specialised policy field.

When asked about actor constellations in the field, the interviewees gave a wide array of answers. One respondent, working as scientific staff for a member of the German national parliament, confirmed the account of the NGO reports, emphasizing the role of agencies' procurement departments, when asked about the most important actors in the field:

"It's not easy to say. Among them are, of course, policy-makers and industry representatives, but certainly police forces and secret services themselves as well. Their procurement departments have the mission to constantly observe the market with regard to all kind of technologies and to conduct research in

165 P. 40 (the graph) of Jones, C, Buxton N., Bunyan, T. ,2017, gives a useful network graph of corporations and institutions from the network that profit from EU security funding.

166 The "European Network of Law Enforcement Technology Services" could be described as a Law enforcement pressure group inside the network.

167 One of the informal nuclei of the JHA field stemming from the 1970s (see also chapter 2)

168 The Standing Committee on Operational Cooperation on Internal Security (COSI) is a high ranking JHA Council working Group and is enshrined in article 71 TFEU tasked with coordinating the security agencies of the member states, for example common responses in the case of major incidents.

169 The mentioned working groups and fora are just a few examples of the institutional landscape in JHA and EU security policy. Other examples could have been possible.

which the stakeholders then participate. We are thus speaking of the industry and the users, in this case, the authorities and the institutes." (Interview with ASc.S)

This interviewee also mentioned the different "fields of expertise" of member states traditionally pushing for specific aspects of surveillance politics:

"There are certain phenomena specific to certain member states. Border surveillance, for example, is a project in which countries such as France or Poland are particularly prominent. Germany, for its part, stands out more when it comes to border control or improving the flow of data. […] In simple terms, the Federal Criminal Police Office often has the task of rolling out the digital red carpet so that it can be walked on once a political decision has been made to do so. [...] As I see it, the United Kingdom and the Netherlands are leading the way in turning police cooperation more and more into intelligence work. There is a tendency of restructuring Europol into an organisation focusing on preventive measures" (Interview with ASc.S)

An interesting aspect was the description of police congresses as hubs fort the security community that are strongly characterized as arms and security fairs in anything but names:

"Referring to it as a Congress is quite a euphemism, but the official title is, indeed, Congress Exhibition. The event is financed by industry stakeholders who are allowed to buy their speaking time as bronze, silver, or gold sponsors, depending on how much they pay. It is somewhat similar to a conglomeration of procurement departments, politicians, and high-ranking ministry officials." (Interview with ASc.S.)

Other aspects that came up during that particular interview worth mentioning were the role of former high-level civil servants becoming successful security consultants in the field and the role of the European Anti-Terror Coordinator – see below for a more detailed description of the latter (Interview with ASc.S).

The topic of research policy came up in several interviews, in particular by interviewees from NGOs and journalistic projects with a focus on digital politics

(Interview with AJ1, Interview AJ2, Interview AJ 3). Some particularly emphasized the role of EU Agencies (Interview with AJ3), others emphasized the role of national member states, and national interior ministries in the field:

"First and foremost, it is the Interior Ministers of the member states who, via the EU Council, are most active in promoting it. Further downstream we have other, similar ministries, Defence also playing a certain role here. Not to be underestimated are the arms and surveillance industries, both of which have a great deal of influence and power. After all, we are talking about billions of research funds and even more billions of investment funds in surveillance technology. In my view, these are the two strongest players who also dominate the media and political debates." (Interview with AJ1)

Another respondent, basically naming the same set of actors, emphasized the importance of European institutions and the closeness between science and industry, the role of the military and security industry, and the importance of the interplay between different levels of policy-making (Interview with AcPE, II). This respondent also emphasized the importance of framings in pushing policies, such as the framing of ever impeding dangers. It is a perpetual "better be prepared", leading to the need to be seen doing something about something, and last not least the need to respond to rising right-wing populist pressure when initiating surveillance policies.

"For example: a speaker at one of the meetings of the community of users at DG Home was saying that the culture of risk right now, the way he understood it, was: 'It is going to happen. Let us be sure that a bad thing is going to happen'." (Interview with AcPE II)

The interviewee also remarked on the fact that the frame and the demand of a "Fortress Europe" has become dominant even in the centre of the political spectrum, not only at its right-wing fringes. (Interview with AcPE II)

"And it has become now, in the last couple of years with the migration crisis, a frame which is shared across the political spectrum. Even centrist parties need, necessarily need, to play with that to a certain extent, because they are forced to by the right-wing spectrum. No one can use the frame of an open Eu-

rope any more. The voters are going to punish them. Even coming from the centre left." (Interview with AcPE II).

The latter remark is an interesting hint towards the popularity of both restrictive measures towards migration and policies of surveillance across the political spectrum and among the populace.

The Frontex expert that was interviewed, when asked about the actors in the field (narrowed down to the political aspects of border protection) emphasized the role of the EU Institutions, of the Council, the Commission (in particular DG Home) and the parliament (here in particular the LIBE committee) in policy-making, as well as the cooperation among the agencies and the importance of the member states when implementing border protection (Interview with FE).

One expert (a privacy and policy consultant) took a different view and argued against the existence of politics of surveillance in the EU, arguing that policies of surveillance are pushed and implemented mainly by and in the member states, seeing the EU as a force that mostly deals with the protection of privacy (interview with C.).

Thus, with some nuances, my interviewees by and large confirmed what was written about the power relations, networks of power and the surveillance special interest network by the NGO reports. This also goes along with the theory of Mann /Domhoff, the networked character of power and the existence of networks of power in this specific policy field and the adaptation of their theories to the field established in chapter 3.

So how is this actor constellation affect policy-making? How does this network of power affect the content of policies and their implementation?

As a caveat it should be mentioned that it is difficult to identify a direct influence on policy-making. The details of the actual process of policy-making are often a black box. Sometimes the attempt on rather direct influencing becomes public, as in the case on of the EOS attempting, partially successful, to influence the development of the Stockholm Programme (Akkerman, M., 2016a,

p.20). Sometimes, there are probable political motives, for example if a politician argues for the implementation of an mass surveillance technology, in this concrete case PNR data retention, on the European level, while one of the leading European companies for that specific technology-Safran-was already successfully implementing it on the national level[170] in EU member states happens to be situated in his constituency (Jones, C, Buxton, N., Bunyan, T., 2017, pp. 47-48, Massé, E., McNamee, J. 2016). More often than not, there is gap in knowledge and the process of lobbying for interests as well as the actual contacts between different actors are hard to reconstruct. Researches have to look into the content of proposals by interest groups and civil society and into policy itself in order to see accordances which argument or interest held sway.

In the case of the EU defence/security and defence policy there seems to be a considerable overlap between proposals made by the fora mentioned above and the final form the funding. The example of the PASR, the security relevant research in FP 6 and the ESRP in FP 7 in which it followed the demands of the ESRAB was already mentioned above. In the case of FP 7, the rationales and priority of the ESRAB were simply adopted. The demands formulated by the ESRAB reports took, a clear stance in favour of the extensive use of surveillance policy (Hayes, B., 2006, p.22, Hayes, B., 2009, p.18, pp. 15-21). Regarding the demands by the ESRAB concerning the security related funding lines in both FP7 and Horizon 2020, it is striking, that from 8 sub- funding lines (topics) 4 were pre-formulated by ESRAB and found their way both into FP 7 and Horizon 2020, another one only emerged in FP7, only 3 topics had no links to ESRAB proposals (Jones, C, Buxton N., Bunyan, T., 2017, p.38). It bears repeating that institutions and companies that dominated the ESRAB and other policy formulating fora and lobby groups were the same that profit-

[170] N.B.: PNR Databases are, while by now mandatory by Union law, is still implemented on the national level. In this case. Arguably by coincident, as the final form of EU legal instrument is determined by way more factors than the probable will of one national government, did the final instrument fit perfectly the existing business model of a given corporation, in this case Safran.

ed from most from the implemented research programmes (Jones, C, Buxton, N., Bunyan, T. 2017, p.66).

Another field, where funding and policy-making are closely related, is the funding for border protection. Here the actors of political network states and EU institutions of the overall actor constellation (the surveillance special interest network) is the more active player, as here it is the EU which is financing, border control capability for member states, prospective member states, non-EU Schengen states, and (non-EU, non-Schengen) partner states, as an element of the externalization strategy discussed in chapter 2. The extension of surveillance technology is an important aspect in this field. From the money spent trough the Schengen Facility 74 % went to ICT and surveillance technology, the overall amount that went to funding of surveillance technology was 42 % (Akkerman, M., 2016a, pp. 26-30, p. 28).[171] [172] [173]

The latter funding, is also a reminder that that it is not only the interest of industry driving the agenda and process of the extension of surveillance policies and technologies itself. The political network is a driving force as well. The supply provided by industry needs a demand to flourish. As described, in chapter 2 and mentioned above in this chapter there is a by now institutionalized, persistent, broadly consensual tendency towards the extension of surveillance in general and border particular, as expressed in the long term policy programmes (see chapter 2) and the extension of the border surveillance regime (chapter 4) as well as research policy (this chapter). Added to that are non-border related policies of mass surveillance such as the Data Retention Directive (see also below) or the EU-US TFTP Treaty of 2009 on the ex-

[171] The Schengen Facility was a limited funding line for New EU Member States in order to help their border security to reach the same level as that of the old member States. It run from 2004-06 and amounted to overall 1.46 Billion Euro (Akkerman, M., 2016a, p.26).

[172] The funding lines that are discussed and summarized here are the Schengen Facility, the External Borders Fund (2007-13,1.70 billion euros), the Internal Security Fund –Borders and Visas (2014-20, 1.32 billion euros), and the Instrument for Pre –Accession I 3 II (2007-03& 20014-20, together 604.9 Million euros) (Akkerman,M., 2016a, pp.26-30).

[173] This discussion of funding lines and the network of power establishing and profiting them is far from complete, readers interested in that topic are referred to the quoted literature.

change of financial transaction data and the long ongoing conflict over encryption. Added to that are surveillance measures by national secret services, and an immense number of measures on the national level.[174] There is little material that gives an overview on the measures passed by the EU. One of the very few studies in that regard is the SECILE study. The study looked at the passing and implementation of anti-terror measures (laws and policies) by the EU since 2001, among them many surveillance policies. It found 239 measures adopted since 2001 until 2013 – which is more than one measure per month on average (Hayes, B., Jones, C., 2013, p. 4). Although only a part of these measures were concerned with surveillance the sheer number of measures indicates the political climate and the overall intra –institutional consensus towards strengthening security, including through surveillance. Without such a general consensus the high number of measures would not have passed.

Often surveillance measures are supported by a grand coalition of across the political spectrum ranging from the centre- left to the far right.[175] This is also reflected in the European Parliament. Often a grand coalition between the EPP and the S&D Fraction plus other non-leftist groups holds sway[176]. However, one should be careful to not over interpret this consensus, as national delegates or even whole EP Groups deviate from the general norm of their bloc in specific cases.[177] The consensus on extending security and surveillance is a broad, long-term tendency, not an iron law of politics. Policy-making is always a contingent business. Nevertheless, it can be argued that the tendency of increasing surveillance and security measure has become institutionalized in EU

[174] A fair assessment of the almost uncountable surveillance measures is clearly beyond the scope of this thesis. For an partisan/activist account that focuses on Germany see here: https://netzpolitik.org/2017/chronik-des-ueberwachungsstaates/

[175] An example would be the first reading on the ETIAS Dossier: https://term8.votewatch.eu/en/term8-european-travel-information-and-authorisation-system-etias-draft-legislative-resolution-provisional-.html

[176] https://www.votewatch.eu/blog/eu-parliamentarians-adopt-the-long-awaited-eu-pnr-directive/

[177] For example the battle on encryption is rather nuanced: https://www.votewatch.eu/blog/cybersecurity-showdown-at-the-european-parliament-where-do-meps-stand-on-encryption/ see also the case of the PNR-Data- Retention Directive.

policy the last 20 years. One institution that illustrates this process of institutionalization is the EU Anti-Terrorism–Coordinator, whose task one Interviewee aptly described as someone who is being paid for overshooting the mark and bringing ideas into the policy cycle, in order to be picked up when appropriate:

“Other players include such illustrious figures as the EU Counter-Terrorism Coordinator, whose mere job title reveals a lot about his activity. One of his tasks is writing six-monthly reports, which are basically wish lists. Which means that he is more or less being paid for overshooting the mark and formulating objectives that are desirable, but not yet feasible politically. On the basis of this wish list, conclusions will then be drawn at some point, stating that the Council also believes that more effort should be made here and there. These conclusions then provide a basis for a number of other individual measures. [...] As soon as the next attack happens, the tenor is: Now, we finally need one tool or another in order to improve the flow of information. And as if by magic, this very tool is already there. This is how these processes work, and the Counter-Terrorism Coordinator definitely plays an important role in it. In addition, we have the industry itself that naturally has a great interest in selling its products. And the European Union is doing all it can to support the industry.” (Interview with Asc.S)

Besides there more tangible interest, there exists also an ideological convergence, a form of implicit ideology which unites many actors in the field. Concepts such Integrated Border Management, the aims of Eurosur or what should be achieved with the projects of interoperability are pervaded by a spirit, that believes that more, better connected data form more sources of surveillance create more security. These ideas often resemble military concepts such as full spectrum dominance, raising question on the necessary and legitimate boundaries of military and police work and the militarization of policing with a profound effect on human rights and civil liberties (Hayes, B., 2009, pp. 29-40, pp. 43-51, pp. 67-71). It is often more of an implicit than an explicit ideology where business interests (of the security industry), practical needs of the security agencies and the policies of the political actors converge. The lack of re-

flection on this implicit ideology and the legal, political and practical shortcomings of such an approach towards security was criticized by several of my interviewees from the NGO sector (interview with AJ3, interview with AJ1, interview with AJ2).

"In recent years, the idea has spread that some sort of benefit could be obtained by using algorithms and huge data sets for decision-making. Which, however, has never been verified, it is no more than a story we simply believe. In fact, we are taking for granted that having huge amounts of data, mixing them up properly and processing them with the appropriate algorithms would be sufficient to obtain useful results." (interview with AJ3)

It also produces a side effect that the boundaries between border policing and internal policing become blurry. The issue of border spaces (in particular airports) being testing grounds for surveillance and policing methods came up several times during my interviews. In this way, the desire to control the borders of the European Union produces a more repressive form of surveillance and policing inside the European Union. (interview with AJ3, interview with C, interview with AJ1, interview AJ2).

A last example for both, the broad policy consensus, and policy-making in the field, including the role of research policy is the development of Eurosur. The roots of the policy go back to 2005 and were linked up to the GAMM.[178] It was initiated together with the smart borders package which resulted in the EES and the ETIAS and also anticipated many aspects that resurfaced in the plans on interoperability discussed in chapter 4 (Hayes, B., 2009, pp. 36-40, Hayes, B. Vermeulen, M., 2012, p.12).[179] [180] From 2005 from to 2008 there

[178] See chapter 2. The GAMM in turn was rooted in policies linked to the strategy of externalisation which aimed at creating a set of rings, or buffer zones stopping migrants around the Schengen Area (See chapter 2 and Hayes, B. Vermeulen, M., 2012, p. 13-14).

[179] Initially the smart border package included the EES and a Registered Travellers Programme (Hayes, B. Vermeulen, M. 2012, pp.11-12), the RTP was ditched, its functionalities will be fulfilled by ETIAS, plans for the ETIAS (under the name ESTA) also went back to this phase (Hayes, B,.2009, pp. 36-40).

[180] For example, the biometric matching service (Hayes, B.,2009, pp. 36-40).

were a number of Frontex –authored feasibility studies (some published, some not), then the Commission 2008 Eurosur Road map which was followed in 2011 by the draft Eurosur Regulation, with the Eurosur Regulation passing the EP in 2013 (Hayes, B., Vermeulen, M., 2012, pp. 11-25).[181] The Eurosur project also found the support of lobby organization of the defence industry such as the EOS and Industry–Government–EU network bodies such as ESRIF (Akkerman, M., 2016a, pp. 19-21, Hayes, B. 2009, p. 37). Already before the policy was finally decided upon, the development of the project was supported by a significant number of research projects in the context of the ESRP, and Eurosur remained an important aspect in border protection related projects in FP6, PASR, FP7 and Horizon 2020 (Hayes, B.2009, pp. 36-40, Akkerman, M., 2016 a, p.30, pp. 47-48). It comes as no big surprise that among the companies that either conducted research on Eurosur or provided elements of the system were companies that form part of the surveillance special interest network (Akkerman, M., 2016a, pp. 34-42, Interview with ASc.S). To a certain degree this is almost, inevitable given the nature of the market and the technology involved. Eurosur relies heavily on satellite technology, which has the drawback that the number of operators with the needed technical capabilities, however, is very limited (Interview with FE) and they happen to be members of the surveillance special interest network (Interview with ASc.S[182]). Besides pushing the project trough research, and of course the financing of the System itself, the EU also assisted member states with the implementation financially through the ISF and EBF funds (Akkerman, M., 2016a, p.26, p.28).

The broad consensus on the extension of surveillance, was also expressed by the ease and speed of the agreement on and implementation of the instrument. From the beginning of the official consultation to the passing of the legislation, it took only 4 years which can only be considered an exceptionally fast process. According to my interview partner the Commission was pushing strongly for the instrument while the member states accepted the necessity of

[181] The MEDSEA study was published while, the BORTEC –Study remained confidential.

[182] The choice is of course further limited by the fact that the operators/producers need to be European companies or companies from allied powers.

the instrument, despite all the underlying reservations on sovereignty (interview with FE).The Arab spring movement and the subsequent collapse of the EU's externalization strategy also pushed the proposal forward (Hayes, B, Vermeulen, M. , 2012., p.11).

Therefore, Eurosur is a good example for the convergence of interest, the way policies of surveillance are promoted, introduced and implemented. It is also an example for the way in which the supranational institutions and the member states agree on the extension of border surveillance, with the desire to solve the wicked policy problem identified in the last chapter as well as the mutual increase in infrastructural power as a driving force.

This section has shown that the last 15-20 years an dense specialised actor-network consisting of actors from the defence industry, other surveillance related industries, national and supranational security and economic agencies, ministries and DGs, senior civil servants, politicians and parliamentarians, denoted here as the surveillance special interest network, has successfully lobbied and initiated policies and technological systems of surveillance concerning the European border surveillance regime. This process was supported by broad consensus in favour of the extension of border surveillance across a significant range of the political spectrum.

However, this consensus is not absolute, neither in the member states, nor in the supranational Institutions, and in particular not in civil society. Not everybody welcomes the extension of border surveillance, as the next section will show.

5.2.2 Resistance to mass surveillance

Unsurprisingly collection of data on this massive scale, interlinking of data, profiling and vetting is not universally appreciated, and sometimes resistance was surprisingly successful. Especially some legal challenges and landmark judgments by the CJEU pose a threat to the emerging border surveillance regime. To add some further complexity to the issue they arose in the conflict about other non-border related instruments.

As said in the previous chapter there is a civil-libertarian counter-network linking up some MEPs, street level activists, lawyers, and NGOs. Even though this network was being more often defeated then successful it sometimes springs into action and achieved some successes.

One case where the EP did resist for a long period but in the end gave in, was the policy of EU PNR-data retention (not to be confused with the PNR-data retention agreement with third countries). The conflict about the policy goes back to the year 2007, but in the year 2013, the LIBE Committee stopped the first proposal for the EU PNR-data -retention scheme. The opposition to the EU PNR data retention scheme was not principled however. It supported the initiative for a new proposal and only added some data protection measures (anonymisation of sensitive data after 30 days, shorter data retention period) of which not all ended up in the final proposal, and some tightening (inclusion of intra-union flights which was stopped by the Council). The proposal raised sharp criticism from civil libertarian NGOs and independent experts, while commercial actors were divided (Bakowski, P., Vorona, S., 2015, pp. 2-8.). In the end, the EP agreed and the regulation was implemented in 2018 (European Parliament and Council of the European Union, 2016, Mrohs, L., 2019).

The agreements with third states about retaining of PNR saw a lot of back and forth throughout the years. Post 9/11 the US pushed for a PNR Agreement with the EU, which was reached in 2004.[183] The European Parliament tried to strike down the agreement via a trial at the CJEU, claiming a false legal basis and won. The court argued that the legal basis of the Agreement was indeed incorrect (CJEU, 2006). The answer of the Commission and the Council was the initiation of a new agreement between the EU and the US, to which the Parliament agreed in 2012 (Vavoula, N., 2016, European Union /Unites States

[183] European Union /United States of America (2004): Agreement between the European Community and the United States of America on the processing and transfer of PNR data by air carriers to the United States Department of Homeland Security, Bureau of Customs and Border Protection, OJ L 183/84

of America, 2012).[184] A similar agreement was concluded in 2006 with Canada, which expired 2009 while in 2013, a new agreement was reached and the EU and its partners. Again, the EP turned towards the CJEU and asked for Opinion, and in 2017 the CJEU concluded that it indeed was incompatible with the fundamental rights guaranteed in the EU Charter of Fundamental Rights effectively killing the agreement and indirectly questioning the legality of the other EU PNR-Data Exchange Agreement with the US and Australia. Particularly interesting is the fact that the CJEU refers in the Opinion to "specific, reliable and non-discriminatory" models for automatic processing of data (CJEU ,2017, III, IX b).

This opinion builds on number of landmarks judgments of the CJEU, which severely restrict the possibility of bulk surveillance and mass data retention. It can be argued that they have to be contextualized into two new political boundary conditions. The first is the incorporation of the EU Charter of Fundamental Rights into primary law of the European Union, which has given that instrument a new standing in the framework of European Union law and the case law of the CJEU. The other, rather indirect one was the impact of Edward Snowden's whistle blowing about practices of mass surveillance of the US Secret Services and their allies, which led the CJEU to re-asses mass surveillance practices.[185]

The first landmark Judgment was the Digital Rights Ireland case in 2014. With this judgment the court struck down the Data Retention Directive, which was obligating the member states to retain all communication meta-data, as invalid and already severely limited the possibility for that kind of drag net surveillance. In this judgment the court severely criticized the mass retention of data of people which were neither accused nor suspected of crimes. Some observers even argued that the court more or less prohibited mass surveillance. While it did not declare data retention per se illegal it factually did so concerning

184 European Union /United States of America (2012.): Agreement between the United States of America and the European Union on the use and transfer of passenger name records to the United States Department of Homeland Security, OJ L 215/5

185 For the latter aspect, see in particular the reasoning of the CJEU in the *Schrems* Judgement.

non-targeted mass surveillance (CJEU, 2014, and Peers, S., 2014). The EU instrument was effectively dead with that judgment. In *Tele 2 Sverige* the Court iterated its standpoint when it struck down two national data retention instruments (from the UK and from Sweden). It made clear that the earlier judgment was also applicable for national instruments and that the retention of data is only permissible when limited in scope for example in time and geographical scope, thus making clear that indiscriminate mass surveillance is not permissible under EU Law (CJEU, 2016). In between these judgments came the *Schrems* Judgment in which the court struck down the agreement between the EU and the US in which the EU declared the level of data protection in the US as equivalent to that in the EU, as guaranteed by US Companies by their declaration, and thus facilitated the exchange of EU Citizens data to the US (the so-called "Safe Harbour Agreement"). In this judgment, the court also made another strong stand against generalized surveillance and unlimited access to data attained in such a fashion, even going so far as arguing that it goes against the essence of some rights guaranteed in the Charta (CJEU, 2015, recital, 94).

Those opinions and judgments made clear that the CJEU will stand in the way of unrestricted surveillance and it is a possibility that they will be invoked against the system of border surveillance in the future, as it has happened in the case of the EU -Canada PNR Agreement. A legal expertise commissioned by the EFA/Green Faction in the EP has for example argued that legal principles developed in these cases should be applied to the EES as well (Cole, M.D., Quintel, T., 2017, pp. 1-2).

What emerges from this short interlude above is that the resistance against mass surveillance arises from civil society and / or the NGO sector. Digital Rights Ireland was an NGO-led lawsuit with the mass support of 12 000 claimants; *Schrems* was led by a single activist who later founded his own NGO.[186] Much of digital activism in the EU relies on NGO work with the EP,

[186] The claimant, Max Schrems, later founded the NGO NYOB- European Center for digital rights (NYOB, 2019)

or rather some parts of the EP, as in the case of the EU-US PNR agreement, as well sometimes parts of the specific industries (as in the case of *Tele 2 Sverige*) as unreliable ally[187] [188]. Looking at all the instruments discussed in the chapter 4, it becomes clear that the EP agrees to measures of surveillance more often than it ultimately resists them and the biggest victories for the civil -libertarian network were in court.

Therefore applying the "who wins?" criteria of power structure research, it could be argued that largely the surveillance special interest network is winning more often than the civil libertarian network.

Combining the findings of both sections together shows a clear dominance of the surveillance special interest network in the field. The interests of the defence and security industry, related research industry, national and European security agencies, and those actors in the national and European legislative and executive institutions who agree with their agenda hold sway. The civil libertarian network which tries to balance out this dominance loses more often than it wins, although it has achieved significant victories.

It can be argued that there is a relative structural dominance of the surveillance special interest network. Its dominance is structural for several reasons. The corporate side of the network forms part of the overall economic network of power that, as Domhoff has shown consistently throughout his book for the US and Mann has shown for the bigger picture, is the strongest network among the four networks of power in the modern industrial world. (Domhoff, G. W. ,2014, Mann, M., 2013, p.428)[189]. Generally speaking the corporate network is not as strong, dominant and autonomous in the EU as it is in the US, yet this is often balanced by the greater ease with which corporate interests organize on the EU level, while civil society is still focused on, and

[187] Arguably not each and every MEP and each and every parliamentary faction supported these cases.
[188] In *Tele 2 Sverige* the telecom company obliged to retain the data went to court against the instrument.
[189] Domhoff's book is cited in its entirety here as Domhoff's analysis consistently emphasises corporate and dominant class power.

"caged" in, the national state.[190] The rather specialist field of EU JHA Affairs is arguably not an exception. While migration is a hot topic in EU politics it is more often than not debated as a national issue, with national interests in mind, in national arenas, as the 2015 crisis had shown.[191] While the migration crisis made the headlines across the continent, this did not have the effect to make the SIS II a household name. Added to these general structural factors came the fact that in this specific field the interests of industry converged with those of parts of the political network, as was shown above. Inside the policy field there is the phenomenon that at least until the Lisbon treaty the Institutional setup of the field was characterized by a lack of control of the executive, as the EP and the CJEU had only limited competences, as described in chapter 2. Once this control was established it clearly limited the dominance of the surveillance special interest network, as it was shown above. Nevertheless, this control was, at least in the case of the EP, limited by the general reluctance of the EP to resist against surveillance measures more often. A reluctance driven, it can be argued (theory-driven) by the interests of both networks of power (member states and supranational institutions) in increasing their infrastructural powers. MEPs' loyalty to either set of institutions and party discipline as well as a genuine support for surveillance more often than not outweighed civil libertarian concerns. This convergence of interest of member states and EU Institutions when it comes to the increase of infrastructural power is another factor why the surveillance special interest network can be considered to be structurally dominant.

An aspect that I did not give much space in detail but that should be mentioned here is that the interest of the military network, also converge with that of the security industry and the civil security agencies. They have neither identical interest, do of course often compete and do not from one monolithic bloc. Especially not in the 28/27 Member states EU with the same number of militaries, police apparatuses, only a nascent European police apparatus and no

[190] See also chapter 3
[191] See also chapter 2

common army. However, it is a reasonable assumption that they would not object to and defence research and better weapons and surveillance technology.

Looking at the ideological network, shows significant support for surveillance measures, expressed in the general rise and support for such policies, and the rise of right-wing parties.

Against these odds, the civil libertarian network fights an uphill battle indeed. Yet it is not completely powerless. The institutional setup did change post - Lisbon, and with it the balance of power. There is no equivalent to the corporate part of the surveillance special interest network nor to the power of the security agencies and the military network in the counter-network. Yet their concerns find an echo in the EP, they were successful in court, and there is a growing part of the political network, such as national data protection agencies or the Fundamental Rights Agency whose very task is to protect rights and liberties. All these voices are heard and their concerns taken into account (Interviews with FE) and they have an influence in policy-making. In related policy fields even a major one, as attested by the passing of the General Data Protection Regulation.

This is why the term relative not absolute form structural dominance applies.

Furthermore, politics is not purely interest driven, it is also normative business. Given a change in political climate, a situation where anti-surveillance stances have a majority in the EP, a majority in the European populace and among a majority of the EU-governments leading to an adjustment of policies in the intra-governmental and supranational institutions as well is, while very unlikely, still at least foreseeable. Such a situation would have tangible effects on policy-making, and could at least in theory, reverse the tide. The relative structural dominance of the surveillance special interest network, the increase of surveillance measures and the extension of restrictive policies on migration look rock solid and very enduring right now, but are not natural law.

5.3 Chapter conclusion

At the end of chapter 3 a number of guiding questions were posed. These questions were:

What is the power structure and its sources of power in the European border regime and the European border surveillance regime?

What is the relation between these two enmeshed power structures?

How is power manifested, produced and reproduced in these two structures in general and in the European border surveillance regime/the potential algorithmic panopticon in particular?

Let's start with the question regarding the power structure.

It might be useful to firstly reiterate the definition of power structure. Power structures were defined as:

"A 'power structure' is a network of organizations and roles within a city or society that is responsible for maintaining the general social structure and shaping new policy initiatives. A 'power elite' is the set of people who are the individual actors within the power structure. Because the social order maintained by the power structure is a stratified one, with great inequalities of wealth and income, a power structure is also a system of organized domination and the power elite often will use intimidation and coercion on its critics and opponents if necessary." (Domhoff, G. W., Dye, T. R. (eds.), 1987, p. 9)

The main source of power in the European border regime is the political network in the form of the member states and the intergovernmental and supranational European Union. Migration policy and border protection are inherently political questions that concern core tasks of the state; therefore, it is unsurprising that it is and was a field that is mostly an issue for the political network. Concerning the relations of power between the member states and the supranational centre and how their relations of power are visible in the political, technological and legal aspects of the system, looking at the systems, their

tech and their law has shown how deeply interwoven power, politics, technology and law are. The competition and parcelling out of competences between the two networks of power was visible up to the technical setup of the Information systems (see chapter 4). Largely they show a policy field where the member states retain a lot of their power, their infrastructural power in particular. By now it can be ascertained that the power and importance of the national member states in the JHA field is reflected and implemented into the legal framework for information systems, and the legal set up of many of the information systems, as seen in chapter 4. It is also embodied and inscribed into the technological artefacts, the information systems and their rules of entering and gathering data themselves. Despite the growth of common EU policies and EU agencies such as Frontex and eu-Lisa, the balance of power is still even between the national member states and the supranational level if not clearly tilted towards the former. The European border regime and the European border surveillance systems is still as much a European system as well as a national one. This is not surprising given the overall setup of the EU Institutions and the importance of the nation states in the JHA domain. Still the extent is remarkable and it is worth noting this characteristic when looking at the distribution of power especially technological-infrastructural power in border control, border surveillance and JHA policy. Concerning the power balance between the supranational and the national network of power great care is taken to not overstep the boundaries of national sovereignty. Largely the member states are still in the driver's seat, and hold to key to infrastructural power. However, looking at power, competences and finances the supranational centre is catching up, in particular through the EU agencies, especially Frontex.

It shows us a European Union in which the member states are, at least as a collective and in the field of JHA, the crucial players. It also shows an EU that is more of supranational and intergovernmental organization than a state, despite its increasing powers and centralizing database regime. The long independence of the executive part of the political network vis-à-vis the legislative and judiciary until the implementation of the Lisbon treaty deserves to be mentioned as well.

The assumption made in chapter 3 that infrastructural power is a key element in understanding the growth of the border surveillance holds up. It is visible in the struggles about competences and implementation regarding the information systems. It might be even more evident as a factor that explains the success of the border surveillance system, expressed as its growth. Increased infrastructural power is what both set of actors get out of the database regime after all. This might also explain the European Parliaments reluctance to actually stop many proposals. Whether the MEPs are federalist or focusing their loyalties on their nation-state, either set of institutions power might grow when the border surveillance system grows. This setup also partly explains the many defeats of the civil libertarian network, which in the end, despite some very significant victories, was not able to stop most of the measures discussed here. The other is the entrenched power of the surveillance special interest networks and its relative structural dominance in the field. Here the economic network comes into play, which has, interwoven with the political network, been shown to have a surprising strong role in policy-making when it comes to researching, initiating and implementing policies and technologies of surveillance in the border surveillance regime. Therefore, at a power structure becomes visible that is state centric, supports the power of the already existing national and European political and economic elites and is less balanced out by civil society than other policy fields. Thus, it reproduces the existing power structures in the member state societies as well as in the EU society.

Regarding the question of the relationship between these two power structures, it emerges that the European border regime and the European border surveillance regime, both are very closely interwoven. At the end of this chapter the argument is made that they are actually one political and technological regime.

Regarding the question of the political functionality of the border surveillance regime it emerges that the aim of the surveillance regime is to implement the border regime and make it work from the perspective of the decision-makers. Besides this basic fact it is also a means to extend the infrastructural power of both the intergovernmental / national network as well as the supranational

network of power. Furthermore, it also represents a means to further the ends of the surveillance special interest network.

Here the strong interrelation between the power structures of a polity, policy-making (policy) and the political functionality becomes visible. From policy-making, policy initiation to the technical setup and implementation of "who gets what, when, how", in terms of funding, contracts, rights, access, data or privacy are interconnected on all levels of policy-making (Hill, M., 2005, p.13). The medium that binds them together in this case is technology.

It is precisely the technological character of the border regime that links big politics, member states' interests, EU Institutions' interests, industry interests, agency interests, law-making, implementation, bureaucracy and technology so tightly. Surveillance technology has become crucial for the overall border regime and the way it is legally and technologically implemented can make a world of a difference in terms of whose interests and rights prevail and how.

It enforces the power of existing power structures towards refugees, migrants, travellers and the European populace as well. It is by and large a political technological system that upholds and deepens existing power structures. Despite all the advanced technology and the promises of a more high-tech and efficient border regime the European border regime and its surveillance regime can be considered a factor that conserves, not changes the status quo. By doing so it also does not solve the inherent problems of the border regime articulated in chapter 2. This results in the assumption that technology can enhance and support policies, it cannot replace them.

Concerning the question of the production and reproduction of power it emerges that the European border surveillance regime has furthermore become a locus of power of its own. It reproduces existing power relations while creating new ones. With frequent occurrences of function creep, this concerns the uses and the number of institutions and people getting access to the data. It very much concerns the number and categories of people that are registered and monitored through the European border regime. With the increase of biometrics, the proliferation of profiling systems and the plans on interoperability

there is also a qualitative change, arguably an intensification, a deepening to the overall system. People are registered and monitored in ways that are more thorough as well as analysed profiled and sorted. The PNR databases the EES and ETIAS turn the border surveillance regime more and more into a proper big data surveillance regime with elements of automated decision-making. In doing so they follow similar "disciplinary" heuristics as other big data based automatic decision-making systems. The same systems also interlink with other non-public surveillance regimes as they partially feed on their data or link up with data from these everyday "private" digital eco-systems.

Thus, they create a kind of indirect panoptic effect, as it challenging for a data subject to determine how ones name, home address means of payment, meal preferences or travel itinerary may raise suspicion when it comes to the Screening of PNR Data, or how the travel data from the EES might affect ones status in the ETIAS screening process. On top of that, all these profiling and screening processes are necessarily algorithmic black boxes. The same goes for some traditional forms of surveillance mechanism such as the Article 36 alerts in the SIS. The same can be said for the planned proposals on interoperability. What data is stored, how it is combined and who gets access to it might not be impossible, but very difficult to retrace for a data subject. Finally, yet importantly the sheer size and number of databases creates a sort of panoptic power. By and large travellers and refugees from non-EU countries but also EU citizens are facing a huge data gathering apparatus and are experiencing a significant asymmetry of power and knowledge vi-a-vis this apparatus. It creates effects and forms of Foucauldian panoptic power, though in an indirect form. Of course, it also creates a form of power that divides between EU citizens, Third-Country Nationals and refugees, which are all subjected to a different degree to the database regime.

The last few passages already implicitly answered the main research question which was asked in the Introduction:

Are the European border regime and the European border surveillance regime turning into an algorithmic panopticon?

The answer is: partially yes. The panoptic effect is indirect, algorithmic decision-making is only used in some systems. However, the interplay of the different digital private and public digital eco-systems of surveillance, the increase of biometrics, the increase of interoperability, the quantitative growth systems and data and in particular the rise of predictive disciplinarian bulk surveillance has led to the above-mentioned qualitative shift. While it is difficult to define a threshold when such a complex technological regime as the European border surveillance regime can legitimately be called panoptical, its panoptical characteristic is certainly emerging, and probably increasing in the future.

Chapter 6: Conclusion

This thesis analysed an emerging techno-political regime the European border surveillance regime. It aimed at analysing its political, legal, and technological characteristics as well as its political, legal, and technological genealogy. The following pages will present the main results as well as some desiderata for future research.

The main result is that the emerging European border surveillance regime is indeed turning the European border regime into a partial algorithmic panopticon.

Since its foundation, the European border surveillance regime has been continuously extended. As can be seen by linking up the policy processes described in chapters 2 and 5 with the technologies presented in chapter 4 this process was a long-term policy, pursued in a time frame of 10-20 years depending on the system and the policy. This process of growth concerns the number of databases, the number of datasets as well as the objects and people registered in them. It concerns the quality and the technical capability of the border surveillance system, through the increasing introduction of biometrics, an increase of interoperability, the growing trend towards predictive forms of analysis, the growing number of actors who have access to the data and through the general improvement in processing capabilities in the IT -sector. Along goes a profound shift in the quantity and quality of surveillance.

The purposes of these systems vary. Some systems have the function to secure the borders and the border space ahead of the actual border. This is explicitly the case with Eurosur.

Many systems have the function of a membrane or filter. They try to assign potential risks to individuals by risk indicators or find lawbreakers or will so in the future. Systems that full-fill such a functionality are the PNR-databases,

the EES, the ETIAS, possibly the VIS. [192] In that function they screen against other databases and verify identities such as the VIS, the EES and the ETIAS. As far they are used for vetting purposes and in particular through the ongoing process of improving interoperability, the most important databases of the European border surveillance regime fulfil or will fulfil the function of a membrane. These are the SIS II, the VIS, the EES, the ETIAS, the ECRIS, ECRIS-TCN, Eurodac, Europol and the Interpol databases. Some databases have the enforcement of the border regime's rules as their primary function (Eurodac and the SIS II).

All these systems and developments taken together means the European border surveillance regime changed from a relatively limited system of mass surveillance to a partly automated, partly biometric, big data mass surveillance system with an increasing tendency to apply pre-emptive and preventive forms of mass scoring and sorting.

It produces a specific form of power: indirect panoptic power. It does not possess a clear centre, there is no equivalent to the central tower in Bentham's model prison. Surveillance is dispersed throughout the different databases and surveillance systems of the European border surveillance regime. As far as these systems rely on data from everyday life of travellers, citizens and refugees (for example credit card data in PNR databases) the sources of surveillance are dispersed in the general eco-systems of surveillance in which almost everybody is embedded in the early 21st century. The different data is combined, often systematically as it demonstrated by the policies of interoperability. In the meantime, a significant number of quite diverse authorities have access to this data. Thus, it is very difficult for the individual to estimate what data is gathered on him, what data might have a negative effect, which data it can be combined with and who has access to it. Anybody crossing EU external borders is likely to be caught in the net and controlled, assessed and analysed

[192] An addition to the VIS which will add the changes discussed in chapter 3 plus adding a new profiling function for „specific risk factors "has entered the negotiation phase of the co-decision procedure and will likely become law (Statewatch, 2019)

in some form. For the concerned individual, just as in the Benthamite panopticon and in Foucault's surveillance society, analysed with the panopticon as a theoretical device, when exactly he is monitored and to what effect is not transparent for legal, technical, political and practical reasons. This is aggravated through the fact that many aspects and forms of surveillance in the European border surveillance regime are necessarily secret for security reason. The panoptic effect is indirect as due to the absence of a centre of surveillance as well as the absence of an internalization effect, as the European border surveillance regime is not well known among those who are targeted by it. In comparison to other security related systems of mass surveillance, for example surveillance by secret services, the European border surveillance regime is relatively transparent. It also possesses a relatively strict data protection regime. However, there is still a massive imbalance of power between the state (s)/the EU and the individual, which is created and enforced through the surveillance regime as was discussed throughout chapters 3, 4, and 5.

The mechanisms of surveillance are employed by the European border surveillance, are similar, not identical, to those described by Foucault in *Discipline and Punish* (Foucault, M., 1995/1975). The non-digital techniques of discipline, whose analysis was the means by which Foucault developed his theories, the generalized practices of digital surveillance employed by private and public actors, and the technologies of the European border surveillance regime, all possess a set of common characteristics, which make them technologies of panoptic discipline. Their function is to make individuals, collectivities, populations and spaces readable and controllable, to monitor and examine them in order to steer and discipline them. The relational, hierarchical forms of surveillance that Foucault analyses are very closely related to the hierarchical relational techniques of discipline he describes. In the 21st century, they re-emerge in digital guise. In technologies such as scoring and profiling for risk assessment purposes, for example in PNR-databases or the ETIAS, the mechanisms of surveillance and discipline and the exam merge in practice.

Other aspects of the border regime and the border surveillance regime are reminiscent of a, rather mild, modern day version of the techniques of con-

finement of mobile populations (Foucault, M., 1995/1975, pp. 141-143). For example, the rule of first entry in the Dublin regulation enforced through Eurodac.

The central political function of the European border surveillance regime is implementing and enforcing the European border regime. It supports the functioning of the border regime, which is de facto used for steering migration, as a common migratory policy is non-existent. In this function, surveillance technologies in the European border regime are also an enhancer of a specific form of power: infrastructural power.[193]

The European border regime was created because of the creation of the common internal market and the Schengen area. The latter created the practical need for a common border regime, which was also codified in the Schengen regulation. The border surveillance regime, which started with the SIS II, was from the very beginning considered as a crucial element of the border regime, needed to compensate the abolition the internal border controls (Baumann, M.., 2014).

On a policy level the European border regime is mostly designed to control irregular and regular migration. This main characteristics of the European border regime can be traced to its very beginning, even before it. The most important policy in that regard is the strategy of externalization. This means cooperating with third states in order to stop refugee even reaching EU territory. When in the aftermath of the Arab spring the cooperating Arab regimes collapsed, the strategy of externalization also collapsed. This was one of the main reasons for the crisis of 2015, together with the inherent problems of the Dublin regime, the non-existent consensus on migration, a number of marginal conditions driving refugees, and the self-organisation of the refugees. The strategy of externalization was resurrected with the EU-Turkey Agreement as

[193] Infrastructural power denotes “the capacity of a state (whether despotic or democratic) to actually penetrate society and implement logistically political decision throughout the realm” (Mann, M., 2012, p.13)

was discussed in the chapter on the development of the border regime, chapter 2.

The CEAS and in particular the Dublin regulation is designed to steer migration and prevent migrants from secondary migration through the rule of first entry. This rule of first entry also creates a second buffer for northern states, the countries of destination for many refugees and shifts the burden of dealing with the incoming influx to the southern border states. It has been a bone of contention ever since.

Besides the more concrete practical needs of border control and border-security the European border regime also doubled as a substitute for the non-existent common migration regime. From the 1980s onwards different member states followed divergent strategies in migration policy, often restrictive, mostly based on economic needs (Kasparek, B., 2017, pp. 7-29). A common market needs a common migration regime in order to be fair, persistent and functional for migrants, refugees, countries of reception and immigration as well as for the economic actors within the common market. A common migration strategy would need a consensus on migration, however, there never was a consensus on migration, nor is there one in sight. In the absence of a common migration regime, the European border regime doubles as a migration regime. This is problematic as it mostly deals with problems of asylum and flight and not with regular migration. In the meantime, migratory pressure persisted. This became evident during the development of the European border regime and the many rounds of reforming and improving the CEAS. It became particularly evident during the dramatic development of the migration crisis as was discussed in chapter 2.

The European border regime, particular the Dublin regulation are thus used for purposes for which they were not designed. Surveillance technologies are used in order to enforce and implement the border regime and steer migration as a tool of infrastructural power. However, they cannot substitute for the lack of a common policy (for a detailed discussion on the border regime see chapter 2).

The European border surveillance regime is rooted in a policy field specific state- centric power structure made of the intergovernmental political network of power (the member states),the supranational political network of power (the EU) and parts of the economic network of power (the defence/ surveillance industry) in which the interests of proponents of surveillance structurally dominant.

The analysis of the power structure was based on previous research, the used literature, the empirical interviews made for the thesis and especially the theorisation of power and power structures by Michael Mann and G. W. Domhoff theorised in chapter 3 (Domhoff, G. W., 2014, Mann, M., 1986/2012, 1993/2012, 2012, 2013). The assumptions made in that chapter were confirmed in the other chapters and supplemented by further aspects.

In the case of the European border regime and the European border, surveillance regime the most relevant of Michael Mann's four networks of power is the political network, the state (Mann, M., 1986/2012, 1993/2012, 2012, 2013)[194]. In this case the political network actually consists of two interdependent political networks which build upon another, cooperate and compete with each other. These are the member states of the EU, which partially ceded sovereignty to create the EU, and the supranational and intergovernmental EU institutions. Together they constitute the political network of concern here: the EU. The balance of power between the different networks of power varies in the different member states, the overall EU and in the different policy domains of the EU. The policies of the European border regime and the overall border surveillance regime mostly fall into the policy domain of EU-Justice and Home Affairs. Because of the politically sensitive matter of this policy domain, touching on core aspects of the sovereignty and core tasks of the member states, the latter are and were particularly reluctant to cede sovereignty in this field as was shown in chapter 2. Therefore, the field was, as also shown in

[194] The details of the power theory of Michael Mann are discussed in chapter 3. All volumes of *The sources of social power* also contain a succinct recapitulation of the basics of his theory (Mann, M., 1986/2012, 1993/2012, 2012, 2013).

chapter 2, up to the Lisbon treaty, characterized by an informal and intergovernmental modus of decision-making with a more limited parliamentary and judicial control through the European Parliament and the CJEU than in other policy fields. This had the effect that member states and the intergovernmental EU-institutions representing them were often the driving forces of policies in this field. Overall the member states were clearly dominating in the field (see chapter 2). This dominance is also visible in the legal and technological set up of the surveillance systems, which gives more control of the data to the member states agencies than to the European agencies (see chapter 4). This does not mean that supranational institutions as such were not important in the field. The member states often cooperated with the Commission when initiating surveillance policies (see chapters 2 and 5). The balance of power changed with the Lisbon Treaty, which gave the European Parliament and the CJEU the same power in the field of Justice and Home Affairs as in other policy domains and shifted the European Charta of Human Rights into primary Union law (see chapter 2 and 5). The European Parliament sometimes used the powers conferred upon it by the treaties to resist measures of surveillance, but in more cases agreed to them, or passed them after long policy conflict. The CJEU took a more activist approach. It seriously undermined the smooth functioning of the Dublin regulation with a number of decisions that gave human rights precedence before the rule of the Dublin regulation. This had significant effects during the crisis in 2015. It furthermore used its post –Lisbon powers, resorting to the European Charta of Human Rights, to restrict the scope of possible mass surveillance in the EU trough a number of landmark judgements, as was discussed by discussing the role of both institutions in chapter 2 and 5.

There is a basic policy consensus between the two levels of the political network on the extension of the European border surveillance systems. Both, the member states and the EU Institutions have an interest in increasing their infrastructural power and enforcing the European border regime. This consensus is shared by the member states and promoted by them through the intergovernmental institutions such as the Council and the European Council as was made clear by the policy documents analysed in chapter 2. It is shared by the

European Commission, and in many cases by the European Parliament as well as was shown see chapters 2, 3, and 5.

Another important network of power is the economic network of power. In the case of the European border surveillance regime, however, there is an identifiable influence on policy-making from the economic network of power. The most important player are the corporations that research, build and implement the systems of surveillance in the European border surveillance regime. These are primarily the defence industry, as well companies from the IT–sector, their lobbyist organizations and to a surprising degree research organization. The latter sector is another important economic actor as far as it is concerned with research on defence, surveillance and security issues. Both sectors (defence industry and research organizations) are due to the nature of their business very closely linked to the political network, which is in both cases their main source of revenue as was discussed in chapter 3 and in particular in chapter 5.

Research policy turned out be a major link between, research organizations, the defence industry national and EU politics. It forms one element of a close policy-making network organized around security policy and what might be called the politics of surveillance. This surveillance special interest network, unites the defence industry, important research organizations, their lobbyist organisations, national and European security agencies, senior civil servants and politicians from the member states and the European institutions, mostly from the executive branch, but also a few MEPs and to a limited degree the military network of power. There were and are a number of de-facto institutionalized policy advice groups in which members of the network pre-formulated policy. Members of these Groups were and are high-ranking representatives from the relevant industries, the member states and the European institutions. Security agencies furthermore form their own policy advice groups. Other crucial meeting points of the network are policy round tables and arms fairs. The proposals made in the related documents are usually a not followed through entirely, though a significant substance becomes policy, in particular when it concerns surveillance related research funding lines. The research thus funded was the preparatory work for concrete border surveillance

technology in some cases. The concerning systems were often built by companies that form part of the network. The demand created by the political network through the creation of the European border surveillance regime is the other main source of revenue for the economic part of the surveillance special interest network. EU funding was also often used for supporting implementation of border surveillance system by the member states. For details on this network see chapter 5.

On an ideological level, the convergence of interests was accompanied by a general increase in security policies during the last 20 years. Including surveillance policies at the borders and beyond. This policy trend was evident in the member states as well on the EU- level. It was supported across the political spectrum, as was discussed in chapter 5.

As it was also discussed in chapter 5, there is, however, also a counter-network, the civil libertarian network, which actively opposes surveillance measures. It mostly consists of NGOs lawyers, some MEPs as well as street level activists. It has consistently acted and argued against the increase of surveillance policies, including the increase of border surveillance. The most effective interventions by this network were by suing against surveillance instruments, which led to the already mentioned landmark judgements by the CJEU.

All the factors named above drove the extension of surveillance measures in general and border surveillance instruments in particular and a solid structural dominance of the surveillance special interest network over the civil libertarian network in the field can be attested.

As with any thesis there are aspects of the issue that are not touched upon, which would nevertheless be issues that would be worthwhile to be researched. Therefore, this section (and this thesis) ends with a delineation of research desiderata in the hope that future researchers pick up the work and continue research on the topic. On a very fundamental level, more research on the power structures of the European Union is desirable. This concerns the different policy domains as well as the overall power structure of the Union. This

concern its theorisation, but in particular the empirical research on this issue This is a giant task, a whole research programme that gives space for a significant number of PhD theses, or the lifetime of researcher –or several. Another aspect concerning the power structure that is worthwhile looking into would be to take a closer look into the role of the military network of power when it comes to initiating and implementing surveillance policies in the European border surveillance regime. Implementation itself is another potentially fruitful research issue, that came up in my interviews, as initiating policies is one thing, implementing another (Interview with AcPE II, Interview with AJ2, Interview with Ac.2, Interview AJ3). In order to assess the efficiency and legitimacy of all these policies, further critical and independent research is certainly necessary-and in the tax payers interest. Such an independent research concerning the effects on civil liberties and human rights, a technology assessment on surveillance technologies, would also be very much desirable. Such research is needed for both the effects on refugees, travellers and Third Country Nationals at the borders, as well for the effects on EU citizens, refugee resident and Third Country National residents inside of the EU. The link between JHA policies and policies in the member states was an issue that came up several times in the interviews (Interview with AJ2, Interview with AJ3, Interview with AJ1).Several interviewees mentioned the border regime as a testing ground for surveillance policies that later will be employed by the member states, in their respective polities (Interview with C., Interview with AJ1, Interview with AJ3). The need to cut down the topic to a manageable complexity prevented further research into this topic, but is certainly an interesting research topic of its own.

This last point indicates crucial aspects of the topic. Surveillance technology has become ubiquitous in everyday life in the industrialized world in the 21st century. Power structures have been ubiquitous in complex society for a much, much longer time. Both these core elements of this thesis concern pretty much everyone that lives in modern industrial society in the year 2019.Yet often they are not researched, reflected and accounted for when researching politics, polities and society whether in the EU or elsewhere. This thesis is an attempt to have a look into their nexus in a rather specific field of policy: the European

border regime and its surveillance regime. Hopefully is has helped to solve some of the related puzzles.

Yet, social science is a collective, collaborative and cooperative effort, and if this thesis does inspire any researcher to continue research on any of the issues that were touched upon in this thesis, the effort was already worth it.

Appendices

Appendix I – a note on the interviews

The methodology for gathering and evaluating empirical data was qualitative. Semi-structured Interviews based on a questionnaire were conducted. The questionnaire was the same for all Interviewees. It consists of 16 open questions subdivided into three sections. The first sections deal with the purpose and meaning of borders broadly speaking, the second questions deals with the praxes of creating, upholding, protecting and monitoring borders and the third section dealt with the politics of surveillance. The questionnaire was designed to be open and applicable to a wide range of stakeholders from policy-makers to practitioners of border protection and security personnel, scientist in the field of surveillance studies, independent experts and experts from privacy and migration NGOs and refugees. The interviewees, their respective organization, or their staff (in the case of policy-makers) were contacted directly via e-mail. Some interview partners were recommended by colleagues from academia (3). I always asked my interviewees for recommendations and therefore previous interviewees recommended some interview partners to me (5). The initial aim was to interview a broad range of stakeholders as possible. However, convincing policy-makers and members of the security forces to consent to an interview has proven to be a challenge despite repeated effort. Therefore, my dataset suffers from the problem of a significant bias towards, academics, journalists and privacy activists.

In the end interviews with 5 Academics (one of them was interviewed twice) from the field of surveillance studies, security studies and policy studies, two

independent journalists and citizens (with activist tinges)[195], two journalists from a publishing project focused on topics of internet politics and surveillance, one representative of an NGO focusing on privacy and civil liberties, one privacy /civil liberties and migration rights activists (who also works a scientific staff member for a member of the German parliament), one representative from a consultancy focusing on privacy issues, one refugee and an representative from Frontex were conducted. Out of the 14 Interviewees, 11 can be considered experts on surveillance, privacy and policies of surveillance. I have very limited to no data on the socio- economic –background of the Interviewees. I have limited data on the educational background of the interviewees; as far as data was available, 10 of 14 Interviewees have an academic degree ranging from undergrad degrees to PhDs.[196] Two of the Interviewees were Union Citizens living and working in a different EU country. One was a Union citizen that worked in another EU country and commuted regularly across the internal border from his home country. One was a third country national living and working in the EU and regularly crossing its external borders, two were Union citizens with second generation migration backgrounds and one was a third country national refugee living and working in the EU.

Altogether,15 Interviews with 14 Persons were conducted. Of these 15 Interviews 14 were recorded. One recoding failed and I had to rely on my notes. One Interviewee (a refugee) refused any recordings; here I also relied on my notes. The remaining 13 recording were transcribed by a typing pool. The transcripts are broad transcripts. The result are 151 pages of transcripts and about 8 hours of Recordings plus notes for the interviews without recordings.

[195] These two persons were part of my personal network. Initially these interviews were considered to be test interviews, In the end they proved so interesting that I've included them into my dataset. I use their interviews also as representing the voice of non-expert citizenry, although of a very non-representative subset: highly educated, left leaning and activist oriented citizens. Their interviews were not directly quoted in this thesis.

[196] Research on this aspect was done in retrospective. Not all Interviewees have publicly available information on their educational CVs. Given their occupations, field of expertise, speech patterns and in the case of personal interviews; their habitus, universally an academic middle-class status can be assumed.

Seven Interviews were conducted in person, the rest via telephone. The questionnaire was in English, the questions were all asked in English, yet six respondents chose to answer in German. Those parts of the German language interviews that were used in this thesis were translated into English by a translator. All interviews that are quoted in this thesis were recorded and transcribed.

This material was analysed via a rough content analysis.

The following is a table of pseudonyms that was used throughout this thesis.

Ac1=Academic 1

Ac.2= Academic 2

Ac.3= Academic 3

Ac.4= Academic 4

ACJ1= Activist/Citizen/Journalist 1

ACJ2= Activist/Citizen/Journalist 2

AJ1= Activist/ Journalist 1

AJ2= Activist /Journalist 2

AJ3= (NGO) Activist

AcPE=Academic/Policy Expert (I = first Interview , II=second Interview).

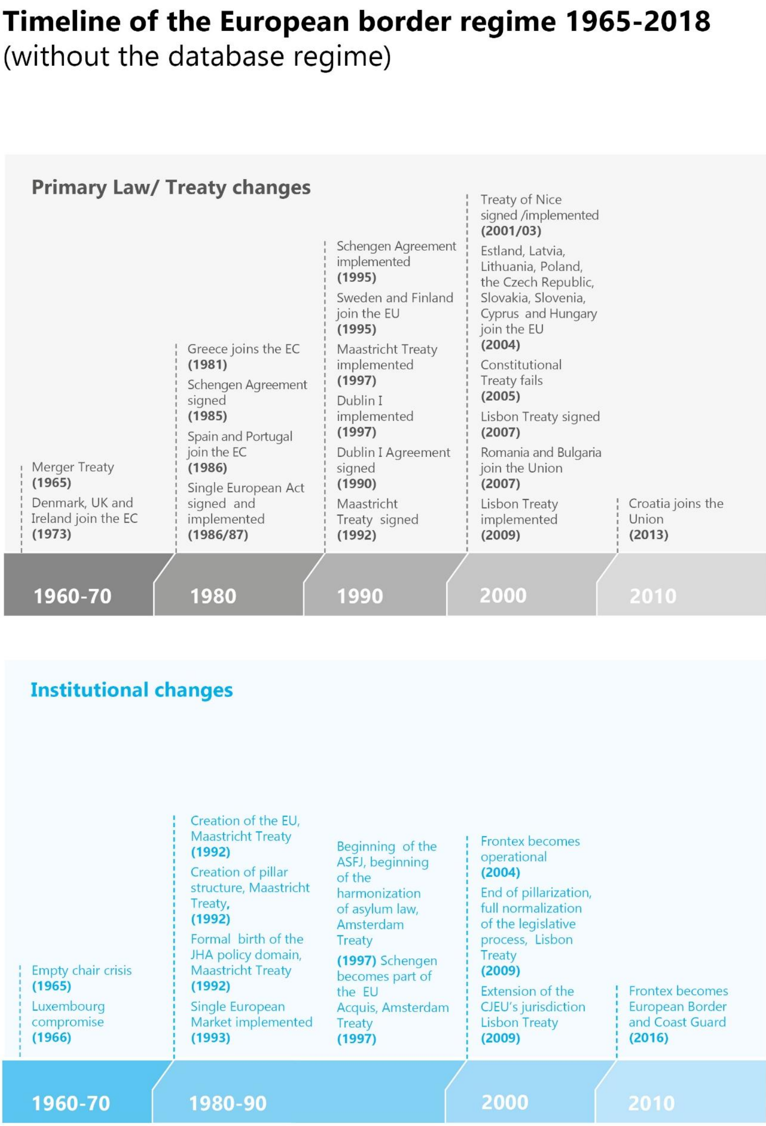
ASc.S=Activists/Scientific Staff of a Member of the German Bundestag

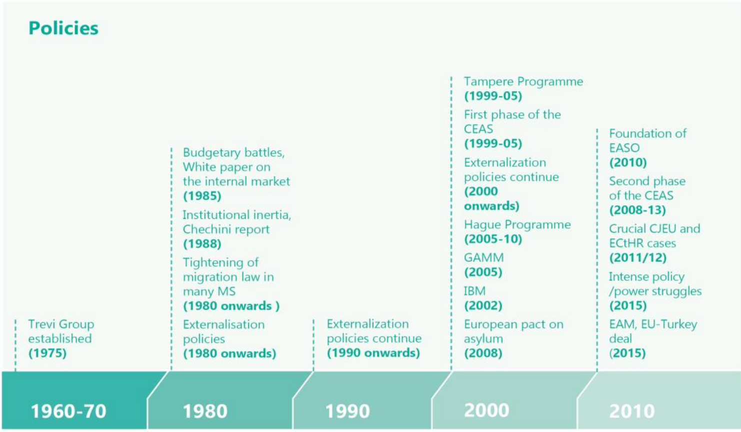
C=Consultant

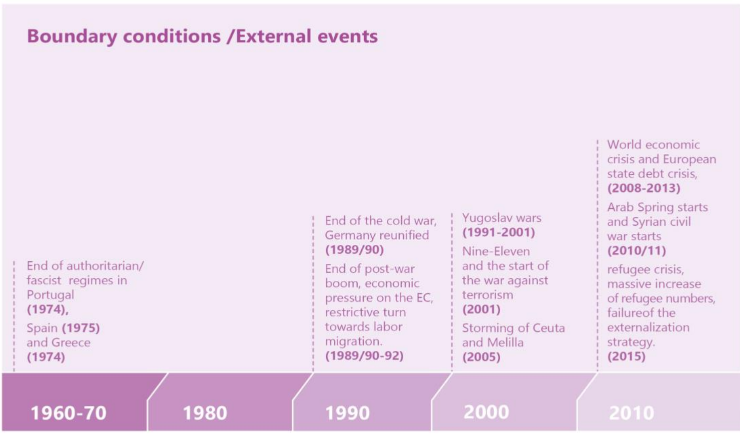
FE=Frontex Expert (technology expert working for Frontex)

R= Refugee

Appendix II – explanatory charts




Policies
Trevi Group established (1975)
Budgetary battles, White paper on the internal market (1985)
Institutional inertia, Chechini report (1988)
Tightening of migration law in many MS (1980 onwards)
Externalisation policies (1980 onwards)
Externalization policies continue (1990 onwards)
Tampere Programme (1999-05)
First phase of the CEAS (1999-05)
Externalization policies continue (2000 onwards)
Hague Programme (2005-10)
GAMM (2005)
IBM (2002)
European pact on asylum (2008)
Foundation of EASO (2010)
Second phase of the CEAS (2008-13)
Crucial CJEU and ECtHR cases (2011/12)
Intense policy /power struggles (2015)
EAM, EU-Turkey deal (2015)
1960-70
1980
1990
2000
2010

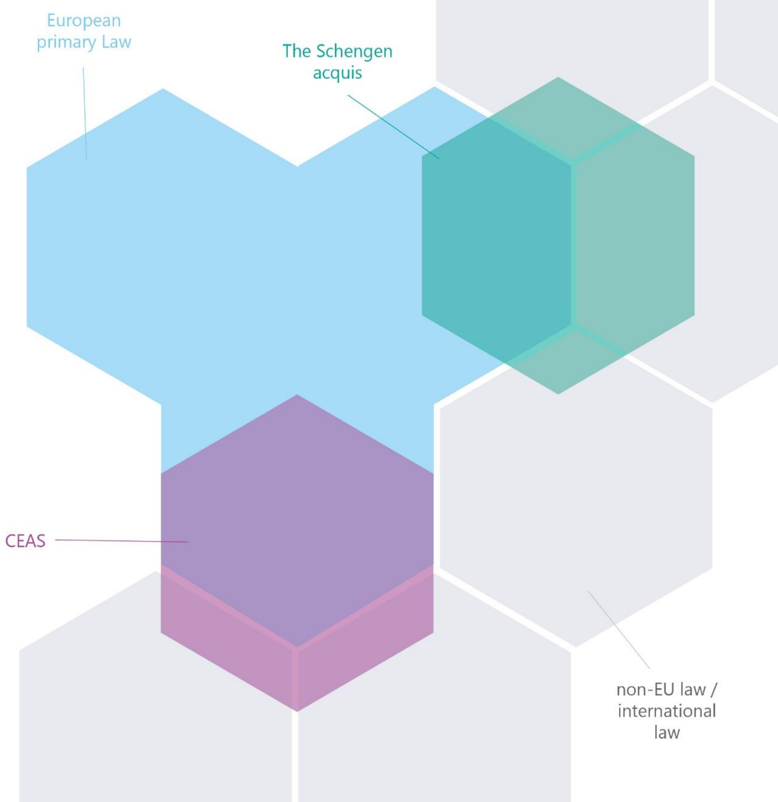

Boundary conditions /External events
End of authoritarian/ fascist regimes in Portugal (1974), Spain (1975) and Greece (1974)
End of the cold war, Germany reunified (1989/90)
End of post-war boom, economic pressure on the EC, restrictive turn towards labor migration. (1989/90-92)
Yugoslav wars (1991-2001)
Nine-Eleven and the start of the war against terrorism (2001)
Storming of Ceuta and Melilla (2005)
World economic crisis and European state debt crisis, (2008-2013)
Arab Spring starts and Syrian civil war starts (2010/11)
refugee crisis, massive increase of refugee numbers, failureof the externalization strategy. (2015)
1960-70
1980
1990
2000
2010

The legal circles of the European border regime

The Schengen acquis: (for EU member states part of the EU acquis communautaire)

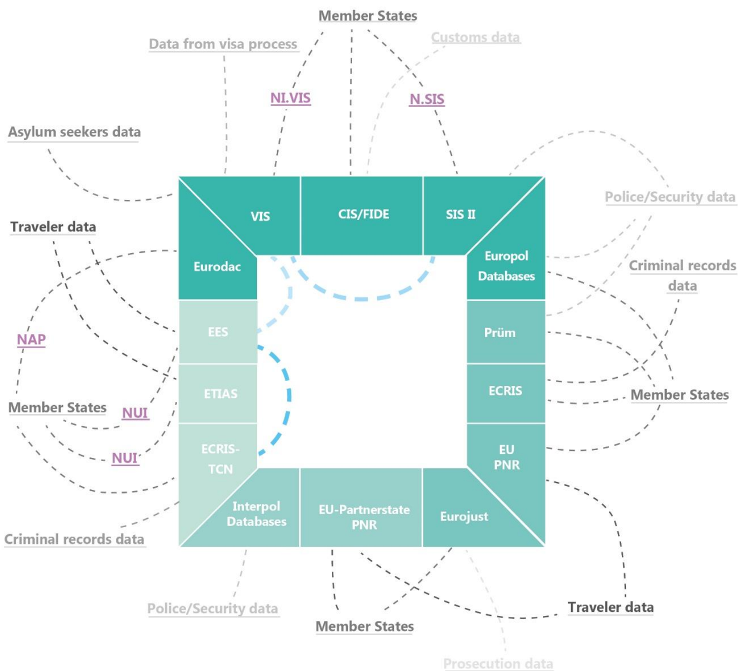
CEAS: Asylum Procedures Directive, Receptions Conditions Directive Qualification Directive, EURODAC Regulation, Dublin Regulation (also international law)

EU acquis communautaire, European primary Law (TEU+TFEU in particular Art.77-79 TFEU)

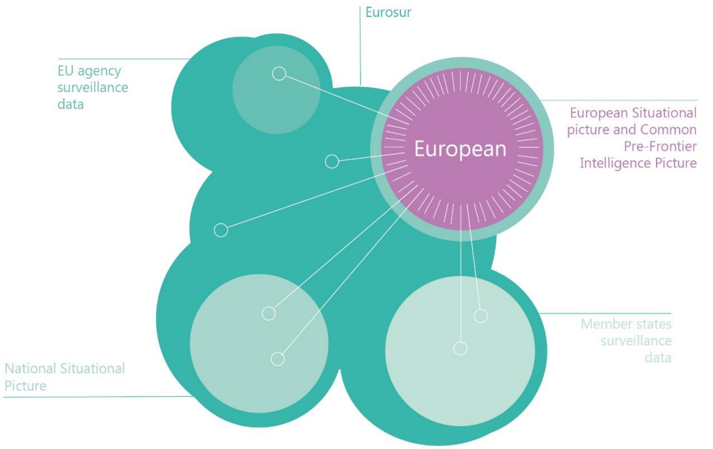


Schematic simplified chart of the European border surveillance system

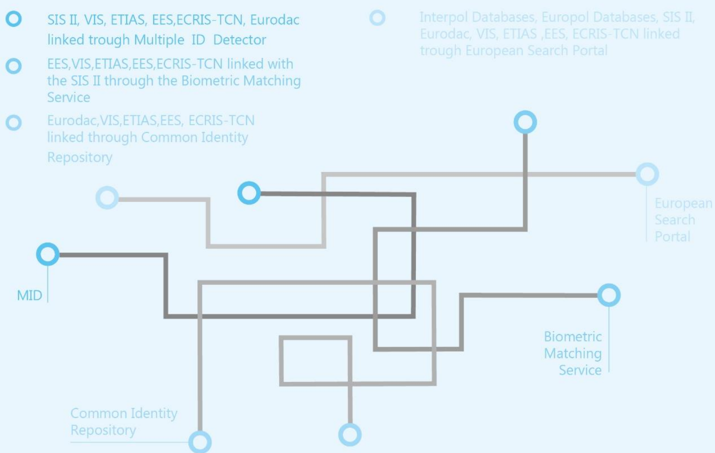
- data flow/type of data
- national databases
- Centralized EU database
- Decentralized EU database
- Non-EU database
- Proposed EU database
- ETIAS uses SIS, VIS, EES, Eurodac, ECRIS, Europol and Interpol data
- VIS uses SIS data for visa vetting
- EES uses VIS data and vice versa



Eurosur



Interoperability of databases



Appendix III – a note on the source material

There a several aspects of the topic of this thesis that had an effect on the available source material as well as the choice of the source material. One is the extremely current and newsworthy character of the topic. When, back in 2014, I decided to write a PhD thesis on the topic of the European border surveillance regime and started the preparatory work on this thesis, I could not have predicted the importance that the topic of the border regime achieved just a few months later. It became not only a dominant topic in public discourse but also extremely controversial. From then on events unfolded, sometimes in neck breaking speed. The border regime partially broke down to later return to a precarious no-quite -status -quo -ante. The border regime in the meantime was further developed and stayed a very dynamic "living" field, although some of the changes have roots in long standing policies. These developments had the effect that the very subject of the thesis (the European border surveillance regime) underwent a number of changes throughout the writing process. The effect of this dynamism on the source material was that I was often in the position to include events as they were happening into the thesis, before they were reflected in academic literature. Therefore, I used a significant amount of grey literature, policy papers and legal proposals and media sources. The policy material and legal sources capture the situation of given proposal at the time of writing of the respective chapters in a time span from 2017 to 2019, however, it might have changed in the meantime. For reasons of time and practicability I did not update each chapter on each of the discussed instruments. Furthermore, in many cases their the final political decision is still impending. Readers who are curious about the final development of these proposals are advised to follow current affairs, in particular media specialised on EU affairs and the official organs of the EU.

The high percentage of policy literature has obviously also to do with the fact that policies are a core aspect of the thesis. The controversial nature of the issue is also reflected in some of the sources, which include a high percentage of NGO published resources, critical scholarship, but also, as a balance, explicit-

ly conservative journalism. The high percentage of NGO sources is also related to the relatively specialised field which sometimes, limits the sources to public policy papers and legal proposals and NGO papers criticising the former. In the case of the special interest surveillance network, there were hardly any other sources besides partisan NGO reports and my interviews. I believe, however, that in the context of a thesis explicitly rooted into the tradition of power structure research the use of such sources is legitimate.

Glossary

APDHA	= Asociación Pro Derechos Humanos de Andalucía / Andalusian Association for Human Rights
AFIS	= Automated Fingerprint Identification System
AFSJ	= Area of Freedom Security and Justice
API	= Advanced Passenger Information
AWF	= Analysis Work File
ASD	= Aerospace and Defence Industries Association of Europe
BAE	= British Aerospace Electronic Systems
CCTV	= Close Circuit Television
CEAS	= Common European Asylum System
CFSP	= Common Foreign and Security Policy
CFR	= Charter of Fundamental Rights of the European Union.
CIS	= Customs Information System
CJEU	= Court of Justice of the European Union
COREPER	= Committee of Permanent Representatives
COSI	= Standing Committee on Operational Cooperation on Internal Security
DG	= Directorate General
EADS	= European Aeronautic Defence and Space Company
EASO	= European Asylum Support Office
EAM	= European Agenda on Migration

EEC = European Economic Community

EES = Entry-Exit System

ECHR = European Convention on Human Rights

ECRIS = European Criminal Record System.

ECRIS-TCN = European Criminal Record System -Third Country Nationals

ECtHR = European Court of Human Rights

EIS = Europol Information System

ENLETS = European Network of Law Enforcement Services

EOS = European Organization for Security

EP = European Parliament

ESRP = European Security Research Programme

ESRAB = European Security Advisory Board

ESRIF = European Security Research and Innovation Forum

EUNAVFOR MED Sophia = European Union Naval Forces Mediterranean

Eurodac = European dactyloscopy database

Eurojust = European Union Judicial Cooperation Unit

Europol = European police office

Eurosur = European Border Surveillance System

ETIAS = European travel information and authorisation system

FIDE = Fichier d’Identification des Dossiers d’Enquêtes Douanières / Customs File Information System

FP = Framework Programme

Frontex / EBCG = Frontières extérieures /European Border and Coast Guard Agency

GAMM = Global Approach to Mobility and Migration

GoP = Group of Personalities

IBM = Integrated Border Management

ICAO = International Civil Aviation Organization

ICMPD = International Centre for Migration Policy Development

IOM = International Organization for Migration

JHA = Justice and Home Affairs.

LIBE = European Parliament Committee on Civil Liberties, Justice and Home Affairs

PASR = Preparatory Action for Security Research

PASAG = The Protection and Security Advisory Group

PNR = Passenger Name Records

Prüm = Stands in this thesis for Prüm Convention

PSR = Power Structure Research

UMF = Universal Message Format

SAR = Search and Rescue

SDA = Security and Defence Agenda

SIS = Schengen Information System

SLTD = Stolen and Lost Travel Documents

SIVE = Sistema Integrado de Vigilancia Exterior /Integrated Surveillance System for the External Borders

SSAG	= Secure Societies Advisory Group
TDAWN	= Travel Documents Associated with Notices (Interpol database)
TEC	= Treaty on Establishing the European Community
TFEU	= Treaty on the Functioning of the European Union
TFTP	= Terrorist Finance Tracking Programme
TREVI –Group	= Terrorisme, Radicalisme, Extrémisme et Violence Internationale (Police working Group)
TEU	= Treaty on European Union
TNO	= Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek /Netherlands Organisation for Applied Scientific Research
VIS	= Visa information System

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This work analyses the emergent European border surveillance regime as part of the European border regime/migratory regime and the power structures this technologogical regime is embedded into, is reproducing and creating. The history, politics, policies and technological characteristics of the border surveillance regime of the EU are analysed through a theoretical framework based in political science, political sociology and surveillance studies.

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